

ROYAL BOTANIC GARDENS, KEW.

BULLETIN

OF

MISCELLANEOUS INFORMATION.

No. 1.

1906.

I.—DECADES KEWENSES

PLANTARUM NOVARUM IN HERBARIO HORTI REGII
CONSERVATARUM.

DECADES XXXVI.—XL.

351. *Actinidia curvidens*, *Dunn* [Ternstroëmiaceæ-Saurauieæ]; species *A. Kolomictæ*, Maxim., affinis, foliis baccisque maculatis distincta.

Frutex scandens, ramulis glabris pallidis lenticellatis. *Folia* chartacea, præter floccos in nervorum primariorum axillis mox glabra, oblongo-lanceolata vel ovata, 3-4 poll. longa, acuminata, serraturarum apiculis prorsum directis; nervi prominentes. *Flores* sæpius solitarii, 6 lin. diam.; pedunculi 6-7 lin. longi. *Sepala* oblonga, obtusa, petalis circiter 2-plo breviora. *Petala* ovato-lanceolata, staminibus paullum longiora. *Ovarium* vel rudimentum lanatum. *Bacca* glabra, cylindrica, obtusa, maculata. *Semina* minute tuberculata.

CHINA. Neighbourhood of Ichang, *A. Henry*, 3471, 3494, 3564, 3955, 4377.

352. *Actinidia Henryi*, *Dunn* [Ternstroëmiaceæ-Saurauieæ]; species *A. strigosæ*, Hook. f. & Thoms., affinis sed foliis subglabris, ramulis floriferis brevibus villosis, baccisque parvis maculatis distincta.

Frutex alte scandens (*A. Henry*), caule striato glabro. *Ramuli* floriferi dense rubro-villosi, alii longi, foliosi, alii brevissimi, flores solum gerentes. *Folia* chartacea, tandem omnino glabra, subtus glauca, lanceolata vel oblongo-ovata, 3-7 poll. longa, acuminata, basi nunc rotundata nunc cordata, minute serrulata, nervis

primum supra puberulis, infra prominentibus rubro-lanatis; petioli laxe hirsuti, laminis 4-plo breviores. *Flores* 5 lin. diam.; pedunculi uniflori, 3-5 lin. longi. *Sepala* orbicularia, pubescentia, petalis duplo breviora. *Petala* alba (A. Henry), ovata, basi cuneata, staminibus vix longiora. *Ovarium* vel rudimentum lanatum. *Bacca* cylindrica, obtusa, subglabra, 6-10 lin. longa, $2\frac{1}{2}$ -4 lin. lata. *Semina* compressa, granulata.

CHINA. Mountains and forests S. and S.E. of Mengtze, Yunnan, 5000-6000 ft., A. Henry, 10,381, 11,307, 13,335.

353. *Actinidia rubricaulis*, Dunn [Ternstroemiaceæ-Saurauieæ]; ab *A. callosa*, Lindl., differt foliorum ambitu, florum magnitudine et ovariis præter verticem glabris.

Frutex alte scandens (A. Henry), omnino glaber. *Ramuli* rubescentes, lenticellati. *Folia* chartacea, oblongo-lanceolata, 3-4 poll. longa, acuminata, basi rotundata, subtiliter serrulata, nervis haud prominentibus. *Flores* 6 lin. diam.; pedunculi sæpissime uniflori, 6-10 lin. longi. *Sepala* oblonga, obtusa, dimidium petalorum paullum superantia. *Petala* lanceolata, staminibus bis longiora. *Ovarium* vel rudimentum præter lanam circa stylos glabrum. *Bacca* ovata, glabra, maculata, 7 lin. longa.

CHINA. Mengtze forests and Feng-chen-lin mountain forest S. of Red River, Yunnan, 7000 ft., A. Henry, 10,696, 11,334.

354. *Connaropsis acuminata*, H. H. W. Pearson [Geraniaceæ]; affinis *C. Griffithii*, Planch., a qua præcipue panicula axillari brevi, et foliolis minoribus recedit.

Arbor vel frutex. *Rami* novelli ferrugineo-pubescentes, tandem glaberrimi, cinerei, lenticellis multis instructi. *Folia* pinnata, trifoliolata, glaberrima; rhachis 1-1 $\frac{1}{2}$ poll. longa, apice paulo dilatata; foliola coriacea, elliptico-lanceolata, acuminata, basi rotundata, nervis secundariis utrinque 6, terminalia 4 $\frac{1}{2}$ -5 poll. longa, 1-1 $\frac{1}{2}$ poll. lata, lateralia 1 $\frac{1}{2}$ -2 $\frac{1}{2}$ poll. longa, $\frac{1}{2}$ - $\frac{3}{4}$ poll. lata. *Panicula* axillaris, laxa, ferrugineo-pubescent, 1 $\frac{1}{2}$ -2 poll. longa. *Sepala* lanceolata, acuminata, obtusa, extus puberula, intus glabra, 2 lin. longa. *Petala* lanceolata, obtusa, glabra, hyalina, 3 lin. longa, nervis parallelis. *Antheræ* ovatæ. *Filamenta* basi flabelliformia. *Ovarium* turbinatum, glabrum. *Styli* 5 reflexi, basi parce strigosi. *Fructus* ignotus.

BORNEO. Sandaken, Ridley, 9,057.

355. *Evodia colorata*, Dunn [Rutaceæ-Zanthoxyleæ]; *E. fraxinifolia*, Hook. f., affinis, fructu distincta.

Arbor 8-20-pedalis (A. Henry). *Folia* opposita, imparipinnata, 4-5-juga, 7-18 poll. longa; foliola petiolulata, papyracea, basi infra obscure hirtella, ovata vel lanceolata, obtuse acuminata, 2-6 poll. longa, integra, venulis haud prominentibus. *Flores* polygami, in corymbos terminales dispositi, 2 lin. longi, tetrameri.

Calyx molliter pubescens, $\frac{1}{2}$ lin. longus, dentibus latis obtusis. *Petala* lutea (A. Henry), calycem 3-plo excedentia. *Stamina* in floribus ♂ petala excedentia, ovarii rudimentum cingentia. *Ovarium* in floribus ♀ 4-lobum, cum gynophoro brevi stylum æquans; stigma 4-lobum, petala excedens. *Capsule* valvæ coriaceæ, rubræ (A. Henry); semina nigra (A. Henry) depresso-globosa, lucida, 3 lin. diam.

CHINA. Yunnan: Szemao forests, 5000 ft., A. Henry, 12,137, 12,137A, 12,137B, 12,137C.

356. *Euthemis ciliata*, H. H. W. Pearson [Ochnaceæ]; affinis *E. minori*, Jack, a qua stylo staminibus brevior, stipulis deltoideis acuminatis et foliis basi minus angustatis differt; etiam ab *E. obtusifolia*, Hook. f. (cujus flores ignoti sunt), stipulis deltoideis, et foliis basi minus cuneatis recedit.

Frutex ramis atris, glaberrimis. *Folia* brevi-petiolata, lineari-lanceolata, basi cuneata, apice obtusa, mucronata, intra marginem obscure spinuloso-serratulum incrassata, nervis permultis curvatis instructa; petioli supra sulcati, 2-3 lin. longi; laminæ $2\frac{1}{2}$ - $3\frac{1}{2}$ poll. longæ, $\frac{3}{4}$ -1 poll. latæ. *Stipulae* oblique deltoideæ, caudato-acuminatæ, glanduloso-ciliatæ, $1\frac{1}{4}$ - $1\frac{1}{2}$ lin. longæ, $\frac{1}{2}$ - $\frac{3}{4}$ lin. latæ. *Racemus* simplex, erectus, primo terminalis, tandem lateralis, 4 poll. longus, nodis 2-3-floris. *Alabastra* conica, acuminata, $2\frac{1}{3}$ -3 lin. longa. *Sepala* breviter spathulata, parce inæqualiterque ciliata, $1\frac{1}{4}$ - $1\frac{1}{2}$ lin. longa, $\frac{3}{4}$ lin. lata. *Petala* ovato-lanceolata, acutiuscula, sub anthesi reflexa, $2\frac{1}{2}$ -3 lin. longa, 1 - $1\frac{1}{4}$ lin. lata. *Stamina* subsessilia, libera, acuminata, 2 lin. longa; staminodia deficientia. *Discus* 5-angulatus. *Ovarium* conicum, 5-angulatum, 5-loculare. Stylus brevis, filiformis; stigma simplex minutum. *Bacca* ignota.

SUMATRA. Penasa Siak, Ridley, 9000.

357. *Guarea syringoides*, C. H. Wright [Meliaceæ]; ex affinitate *G. pedicellatæ*, C.DC., qua foliis cuspidatis recedit.

Arbor robusta. *Ramuli* furfuracei, siccitate minute sulcati. *Folia* 2-3-juga; foliola opposita 4 poll. longa, $2\frac{1}{4}$ poll. lata, ovata, glabra, basi apiceque breviter acuminata, integra, nervis secundariis 4-6-jugis, petiolulis semipollicaribus. *Panicula* angustæ, laxifloræ; pedicelli tenues, 2 lin. longi. *Calyx* $\frac{1}{3}$ lin. longus, 4-dentatus. *Petala* oblonga, obtusa, glabra, 2 lin. longa, $\frac{2}{3}$ lin. lata. *Staminum* tubus petalis paullo brevior, apice minutissime lobatus. *Ovarium* ovoideum, glabrum, gynophoro brevi suffultum; stylus subulatus, tubo staminum exsertus; stigma discoideum.

ECUADOR. Eggers, 15,602, 15,718.

358. *Swintonia puberula*, H. H. W. Pearson [Anacardiaceæ]; affinis *S. Helfer*i, Hook. f., a qua præcipue panicula crassiore puberulaque, foliis minoribus, petiolo supra bicaniculato differt.

Arbor ramis novellis atris in longitudinem canaliculatis. *Folia* petiolata; laminæ membranaceæ, utrinque concolores,

glaberrimæ, elliptico-lanceolatae, acuminatae, obtusae, basi cuneatae paulo secus petiolos decurrentes, marginibus undulatis, nervis lateralibus præcipuis 12–20 tenuibus arcuatim patentibus $3\frac{1}{2}$ –6 poll. longæ; petioli semiteretes, supra bicanaliculati, $1\frac{1}{2}$ – $2\frac{1}{4}$ poll. longi. *Panicula* foliis paulo longior, ramis crassis, minute puberula. *Flores* brevissime pedicellati. *Calycis* tubus brevis, obconicus, extus rugosus, 1 lin. longus; lobi semiorbiculares, fimbriati. *Petala* oblongo-ovata, obtusa, crassiuscula, intus minute pubescentia, extus puberula, accrescentia, 2.5–3 lin. longa. *Staminum* filamenta petalos æquantia; antheræ albæ. *Ovarium* ovoideum, parce strigosum, tandem glabrescens, $\frac{3}{4}$ –1 lin. longum; stylus ovario bis longior. *Drupa* ignota.

PERAK. Bujong-Malacca, *Ridley*, 9650.

359. *Semecarpus cinerea*, *H. H. W. Pearson* [Anacardiaceæ]; affinis *S. australiensi*, Engl., a qua præcipue floribus 6-meris pedicellatis majoribus et foliis virido-cinerascentibus minoribus differt.

Arbor ramulis novellis pallidis teretibus fusco-puberulis. *Folia* alternata, subcoriacea, integra, elliptica, lanceolata, obtusa vel breviter acuta, apiculata, basi cuneata, paullum decurrentia, supra glabra, nitentia, virido-cinerascentia, margine crassiusculo undulato, nervis lateralibus utrinque 6–8 arcuatim adscendentibus, venis reticulatis prominentibus, secundum nervos purpurascens, costa depressa, subtus (nervis exceptis) squamis minutis argenteis dense vestita nervis puberulis; lamina 3 – $5\frac{1}{4}$ poll. longa, $1\frac{1}{2}$ – $2\frac{1}{4}$ poll. lata; petiolus $\frac{1}{2}$ –1 poll. longus, supra sulcatus. *Panicula* ampla, axillaris, fusco-pubescentia, foliis brevior. Bractæe subulatae, fusco-pubescentes, $1\frac{1}{2}$ –2 lin. longæ. *Flores* ♀ pedicellati, 2 lin. lati. *Calycis* tubus 6-dentatus, brevis, extus dense fusco-pubescentia. *Petala* 6, imbricata, libera, triangulo-ovata, 1– $1\frac{1}{2}$ lin. longa, basi paullum attenuata et extus puberula, intus glabrescentia, nervis atris parallelis, margine hyalino angusto. *Stamina* 6, imperfecta, filamentis infra dilatatis $\frac{3}{4}$ –1 lin. longis. *Discus* intrastaminalis, annularis, intus strigosus. *Ovarium* liberum, globoso-ovoidum, dense strigosum. *Styli* 3, depressi, stigmatibus magnis atris bilobis. *Ovulum* infra apicem loculi suspensum. *Drupa* immatura pubescens vel glabrescens.

COAST OF MALAY PENINSULA. Carimon Islands, *Ridley*, 7115.

360. *Eugenia Prora*, *Burkill* [Myrtaceæ-Myrtæ]; foliis longissime acuminatis (hinc nomen dedi) inter species insularum maris pacifici facile distincta.

Frutex 12–25 ped. altus (*fide Horne*). *Rami* siccati cortice cinnamomeo, fere læves. *Folia* ovato-elliptica, glabra, supra nitida, basi angustata, longissime acuminata ad apicem rotundata, nervis lateralibus sat conspicuis numerosis fere rectis nervo submarginali conjunctis, $2\frac{1}{4}$ –3 poll. longa, 11–14 lin. lata; acumen ad 8 lin. longum; petiolus 5–7 lin. longus. *Panicula* corymbiformis, sub anthesin 2 poll. diam., fructu maturo multo auctus, circa 5 poll. diam.; pedunculi et pedicelli quadrangulares;

bracteæ subulatæ, cite deciduæ. *Alabastra* elongato-pyriformia, sub anthesi $\frac{1}{2}$ poll. longa. *Sepala* indistincta, annulum formantia. *Petala* sub anthesi lacerata, caduca. *Stamina* roseo-purpurea; filamenta 2 lin. longa. *Fructus* elongato-ovoideus, $\frac{3}{4}$ poll. longus, $2\frac{1}{2}$ -3 lin. diam., calyce coronatus, venis notatus.

FIJI ISLANDS. Viti Levu, near Namosi, in mountain forests; *Horne*, 774, 874, and without precise locality, *Yeoward*, 41.

361. *Dissochaeta pentamera*, *Burkill* [Melastomaceæ]; e sectione *Diplostemonis* species distinctissima.

Frutex scandens. *Rami* quadrangulares, siccitate sulcati, ad nodos conspicue tumidi, annulati, glabri. *Folia* ovato-orbicularia, 9-nervia, apice obtusissima, basi subcordata, glabra, 3-3 $\frac{1}{2}$ poll. longa, 2 $\frac{3}{4}$ -3 $\frac{1}{4}$ poll. lata, margine dentibus minutis papilliformibus perpaucis instructa; petiolus 1 $\frac{1}{4}$ -1 $\frac{1}{2}$ poll. longus. *Panicula* laxiflora, ad 5 poll. longa, ad 4 poll. diam.; bracteæ minutæ. *Calyx* truncatus, denticulis 5 punctiformibus auctus, glaber. *Petala* ovata, subacuminata, 5 lin. longa, violacea. *Stamina* 10; antheræ incurvæ, apice obtusæ, 1-porosæ, fere 3 lin. longæ, calcare vix $\frac{1}{3}$ lin. longo. *Ovarium* 5-loculare, vertice glabrum; stylus filiformis, apicem versus hamatus, staminibus longior.

BRITISH NEW GUINEA. Between the south coast and the Owen Stanley mountains, *Burke*, 372.

362. *Bidens simplicifolia*, *C. H. Wright* [Compositæ-Helianthoideæ]; a speciebus reliquis Austro-Americanis foliis indivisio ovatis acuminatis differt.

Frutex scandens. *Rami* tereti, leviter striati, glabri. *Folia* ovata, acuminata, serrata, utrinque minute papillosa, basi primum rotundata, deinde ad petiolum decurrentia, 2 $\frac{1}{4}$ poll. longa, 1 $\frac{3}{4}$ poll. lata; petiolus 6 lin. longus. *Pedunculi* 2 poll. longi. *Bracteæ* oblongæ, acutæ, scarioso-marginatæ. *Paleæ* receptaculi lineares, acutæ. *Flores* radii lutei. *Corolla* 3 lin. lata. *Flores* disci 5 lin. longi. *Achenia* compressa, 5 lin. longa, leviter striata, marginibus ciliatis; aristæ 2-2 $\frac{1}{2}$ lin. longæ.

ECUADOR. *Eggers*, 15,725.

363. *Cuscuta* (§*Monogynella*) *Upcraftii*, *H. H. W. Pearson* [Convolvulaceæ]; a *C. lupuliformi*, *Krocker*, præcipue floribus minoribus, stylo brevior bifido et ovario globoso differt.

Caules tenuiter filiformes. *Spica* laxa, pauciflora, simplex, nodis 2-3-floris, $\frac{1}{2}$ - $\frac{3}{4}$ poll. longa. *Flores* sessiles, 1-2 lin. longi. *Calyx* late campanulatus, alte partitus, membranaceus; lobi imbricati, concavi, late triangulares, nonnunquam paulo auriculati, apice rotundati, $\frac{3}{4}$ lin. longi, 1 lin. lati. *Corollæ* tubus cylindricus, calyce fere bis longior; lacinie ellipticæ, obtusæ, tubo breviores, per anthesin patulæ vel reflexæ. *Antheræ* ovatæ, fauci subsessiles. *Squamæ* oblongæ, laciniato-fimbriatæ, fere medio tubo adnatæ, inclusæ, conniventes. *Ovarium* globosum, apice depressum; stylus apice bifidus, ovario paulo longior, lobis stigmatibus

ovatis. *Capsula* ovata, obtusa, 1-sperma, 2-3 lin. longa; semen semiorbiculare, lineis brevibus tenuissimis ornatum, $1\frac{1}{2}$ lin. diam.

EAST TIBET, between Tachienlu and Batang, 9000-14,000 ft., Upcraft.

The seeds from which this specimen was grown were collected by Mr. W. M. Upcraft, an American Missionary, in 1898. They were germinated by Mr. A. K. Bulley, and the seedlings successfully grown on potato plants. The natural host is unknown.

By its bifid style this species is also allied to the North American *C. exaltata* Engelm., of which Engelmann says "This is the only species of this section (Monogynella) where the styles are not completely united."

364. *Achatocarpus pubescens*, C. H. Wright [Amarantaceæ]; folia late elliptica vel suborbicularia, subtus pubescentia.

Arbor 12-pedalis. *Ramuli* pubescentes, cinerei. *Folia* late elliptica vel suborbicularia, $2\frac{1}{2}$ poll. longa, $1\frac{3}{4}$ poll. lata, supra glabra, siccitate nigrescentia, subtus pubescentia, basi in petiolum 3 lin. longum attenuata. *Panicula* multifloræ. *Flos* ♂: Perianthii lobi ovales, concavi, imbricati, virescentes. *Filamenta* longa, tenuia; antheræ oblongæ. *Flos* ♀: Perianthii lobi ovales, imbricati, exteriores minores. *Ovarium* ovale, compressum; styli recurvi, ovario longiores.—*A. præcox*, Schinz et Autran in Bull. Herb. Boiss. i. p. 6, ex parte, non Griseb.

ECUADOR. Guayaquil, Jameson, 528; without exact locality, Eggers, 15503.

365. *Spathanthus Jenmani*, N. E. Brown [Rapateaceæ]; a *S. unilaterale*, Desv., foliis basi cordatis recedit.

Folia longe petiolata, glabra; petiolus supra vaginam 8-9 poll. longus; lamina 2 ped. longa vel ultra, $2\frac{1}{2}$ -3 poll. lata, ligulata, acuta, basi inæqualiter cordata. *Petunculi* usque ad 15 poll. longi, subcompressi, glabri. *Spatha* $2\frac{1}{4}$ - $3\frac{3}{4}$ poll. longa, 1 poll. lata, navicularis, acuta, glabra. *Spadix* 1- $1\frac{3}{4}$ poll. longus, spathæ dorso adnatus, densissime multiflorus. *Bractea* $4\frac{1}{2}$ lin. longæ, $\frac{1}{3}$ lin. latæ, lineares vel lineari-spathulatæ, apice concavæ, obtusæ, apiculatæ. *Flores* immaturi.

BRITISH GUIANA. Waratuk Path, Potaro River, Jenman, 7468.

366. *Aristolochia* (*Gymnolobus*) *dæmoninnoxia*, Masters [Aristolochiaceæ]; affinis *A. Ruiziana*, Duchartre, floribus minoribus, et perianthii tubo magis ventricosio intus superne glandulis duabus magnis appplanatis munito differt.

Frutex scandens, cortice suberoso profunde longitudinaliter rimoso. *Folia* remotiuscula; petioli ad $2\frac{1}{2}$ poll. longi; laminæ circiter 5 poll. longæ et 6 poll. latæ, subcoriaceæ, glabræ, subtus setis albidis dense obtectæ, ovatæ, acutæ vel suborbiculares, 5-nerviæ;

lobi basales rotundi, late divergentes. *Inflorescentia* pluriflora, e ramis lignosis enascens. *Perianthium* 1-labiatum, ecaudatum, cum tubo circiter 3 poll. longum; tubus basi ventricosus, intus superne glandulis duabus magnis appianatis munitus, medio arcte sursum flexus, in limbum unilateralem 2-2½ poll. latum dilatatus. *Gynandrophorum* 6-lobum, lobis oblongis obtusis ad margines recurvatis. *Antheræ* lineares oblongæ, tubo gynandrophori parum breviores. *Capsula* circiter 4 poll. longa, lineari-oblonga, obtusa, 6-valva. *Semina* circiter ¼ poll. longa, oblonga, retusa, complanata, anguste alata, dorso convexa, ventre concava, nervo medio prominente signata.

BRITISH GUIANA. Demerara, *Jenman*, 6915.

Known to the Indians as "Boehari," which means "devil-doer."

367. *Aristolochia* (*Gymnolobus*) *consimilis*, *Masters* [Aristolochiaceæ]; *A. rumicifolia*, Mart. et Zucc., haud dissimilis, foliis autem basi nec dilatatis et peranthii limbo suborbiculari.

Frutex scandens, hirtus, cortice suberoso. *Petoli* ¾ poll. longi; laminæ circiter 5 poll. longæ, 2½ poll. latæ, subcoriaceæ, superne glabrescentes, oblongæ, acuminatæ, basi cordatæ, lobis rotundatis parallelis, 5-nerviæ, nervis secundariis transversis parum remotis. *Inflorescentia* axillaris, gracilis, ad 2 poll. longa, bracteis foliaceis sparsis ovato-acuminatis prædita. *Perianthium* 1-labiatum, caudatum, circiter 1½ poll. longum, basi ventricosum, intus glabrum, inter partem ventricosam et partem tubulosam lamina membranacea deflexa uno latere onustum, tubo parum curvato gracili cylindrico superne in limbum 1-labiatum suborbicularem circiter ½ poll. diam. expansum. *Gynandrophori* lobis oblongi, obtusi, ad margines revoluti.

BRITISH GUIANA. Demerara River, *Jenman*, 6916.

368. *Xanthosoma cordatum*, *N. E. Brown* [Aroideæ-Colocasiæ]; affinis *X. blando*, Schott, sed foliis cordatis facile distinguitur.

Folia magna, glabra; petioli 2 ped. longi vel ultra, brunneo-violacei, ad apicem vaginati; laminæ usque 1¾ ped. longæ, 1¼ ped. latæ, cordatæ, acutæ; lobis basales semiorbiculati; nervi primarii laterales utrinque 6-8; costæ basales in sinu denudatæ, quam lobis basales triplo breviores, ad apicem 3-4 ramosi et latere uno nervos primarios 3-4 emittentes. *Pedunculus* 9-11 poll. longus, compressus, superne pallide virens, inferne ferrugineo-tinctus. *Spathæ* tubus subglobosus, 1¾ poll. diam., utrinque viridis, extra leviter pruinosis; lamina 6 poll. longa, oblongo-cymbiformis, acuminata, extra flavo-virens, inferne roseo-tincta, intus albida. *Spadix* quam spatha brevior; pars feminea 1 poll. longa, flavida; pars neutra 1¾ poll. longa, rosea; pars mascula 3½ poll. longa, albida.

BRITISH GUIANA. Described from a plant cultivated at Kew.

369. *Alsophila costularis*, Baker [Filices-Cyatheaceæ]; habitus et pinnæ omnino *A. contaminantis*, Wall.; recedit costis pinnulorum dorso pilosis, soris costalibus.

Caudex ad 20 pedes attingens. *Lamina* ampla, deltoidea, tripinnatifida vel tripinnata, dorso pallide viridis haud glauca, ultra costas pinnularum glabra; rhachis primaria valida, inermis, nuda, pallide brunnea; pinnæ oblongo-lanceolatae, sessiles, bipedales; pinnulae lanceolatae, sessiles, inferiores $3\frac{1}{2}$ –4 poll. longæ, 7–8 lin. latæ, ad basin pinnatae, lobis tertiariis lineari-oblongis $1\frac{1}{2}$ lin. latis leviter serratis; venæ 10–12-jugæ, profunde furcatae. *Sori* costales, ad basin venarum impositi, haud conferti.

CHINA. Yunnan: forests of Szemao, at 6000 ft., Henry, 13,136.

370. *Davallia* (*Leucostegia*) *rigidula*, Baker [Filices-Polypodiaceæ]; ad *D. affinem*, Hook., accedit; differt frondibus rigidulis, paleis basalibus haud acuminatis et soris supra medium segmentorum ultimorum impositis.

Rhizoma late repens, 3 lin. diam., paleis ovatis imbricatis subacutis vel obtusis membranaceis pallide brunneis vestitum. *Stipites* graciles, remoti, 6–9 poll. longi, straminei, infra parce paleacei. *Lamina* deltoidea, decomposita, rigidula, pedalia, utrinque viridis, glabra; rhachis primaria gracilis, nuda; pinnæ deltoideae, petiolatae; basales reliquis multo majores, ad latus inferius productae; segmenta ultima linearia vel spathulata, acuta, 1– $1\frac{1}{2}$ lin. longa. *Sori* ad segmenta ultima solitarü vel bini, prope apicem impositi. *Indusium* orbiculare, glabrum, pallidum, $\frac{1}{3}$ lin. diam.

CHINA. Yunnan: Mengtze and Szemao, on rocks at 5000 ft., Henry, 10,333, 13,069.

371. *Davallia* (*Eudavallia*) *henryana*, Baker [Filices-Polypodiaceæ]; ad *D. griffithianam*, Hook., accedit; differt soris minoribus prope basin segmentorum ultimorum impositis.

Rhizoma late repens, 3 lin. diam., paleis ascendentibus imbricatis linearibus scariosis albidis vestitum. *Stipites* remoti, graciles, nudi, pallidi, 3–8 poll. longi. *Lamina* deltoidea, tripinnata, 3–12 poll. longa, rigida, utrinque glabra; rhachis gracilis, nuda; pinnæ superiores lanceolatae, ad basin inferiorem reductae, cuneatae; basales reliquis multo majores, ad latus inferius productae; segmenta ultima lineari-oblonga, inferiora profunde pinnatifida; venæ occultae, immersae. *Sori* solitarii, prope basin segmentorum ultimorum impositi. *Indusium* orbiculare, glabrum, pallidum, $\frac{1}{2}$ lin. diam.

CHINA. Yunnan: mountains to the east of Szemao, in forests at 5000 ft., Henry, 10,082.

373. *Cheilanthes* (*Aleuritopteris*) *subrufa*, Baker [Filices-Polypodiaceæ]; inter *C. farinosam*, Kaulf., et *C. rufam*, D. Don, medium tenens.

Caudex erectus; paleae basilares lineares, densae, concolores. *Stipites* 2–4 poll. longi, caespitosi, ubique paleacei. *Lamina*

subdeltoidea, bipinnata, 5-6 poll. longa, ad basin $3\frac{1}{2}$ -4 poll. lata, facie viridis, glabra, dorso albo-cerata; rhachis ad apicem paleacea; pinnæ sessiles, lanceolatae; basales reliquis majores, ad latus inferius productæ; pinnulæ lineares, obtusæ, inferiores crenatæ. *Sori* contigui. *Indusium* latum, pallidum, persistens, sæpe fimbriatum.

CHINA. Yunnan: mountains to the north of Mengtze, at 7000 ft., *Henry*, 11,831.

374. *Lomaria* (*Plagiogyria*) *decurrens*, *Baker* [Filices-Polypodiaceæ]; ab speciebus reliquis hujus stirpis recedit frondibus lanceolatis ad basin sensim attenuatis.

Caudex erectus. *Stipites* cæspitosi, castanei, basi incrassati, angulati, frondium steriliū 4-5 poll. longi, fertiliū 12-15 poll. longi. *Lamina* sterilis lanceolata, membranacea, simpliciter pinnata, 15-16 poll. longa, medio 2-3 poll. lata, ad basin sensim attenuata; pinnæ centrales lanceolatae, contiguæ, 12-18 lin. longæ, infra 4-5 lin. latæ, per basin totam adnatæ, supra serratæ; venæ laxæ, perspicuæ, simplices vel furcatæ. *Lamina* fertilis pinnis angustioribus haud contiguis instructa.

CHINA. Yunnan: mountains to east of Mengtze, at 6000 ft., *Henry*, 9036.

375. *Asplenium* (*Athyrium*) *sinense*, *Baker* [Filices-Polypodiaceæ]; inter *A. thelypteroidem*, Michx., et *A. nigripedem*, Blume, medium tenens.

Caudex haud visus; paleæ basilares lineares, firmulæ, atro-castaneæ. *Stipites* graciles, straminei, subpedales, supra basin nudi. *Lamina* oblongo-lanceolata, bipinnata, pedalis, 5-6 poll. lata, membranacea, utrinque viridis, glabra; pinnæ lanceolatae, sessiles, basi truncatæ, 3- $3\frac{1}{2}$ poll. longæ, 9-10 lin. latæ; inferiores haud reductæ; pinnulæ oblongæ, obtusæ, dentatæ, 2-3 lin. latæ, ad basin superiorem rectæ, productæ, subauriculatæ, ad basin inferiorem reductæ, cuneatæ; venæ ad lobos basales pinnularum pinnatæ. *Sori* 5-6-jugi, costales, paralleli, 2 lin. longi. *Indusium* membranaceum, glabrum, persistens.

CHINA. Yunnan: mountain forests to the north of Mengtze, *Henry*, 10,101.

376. *Asplenium* (*Diplazium*) *parallelosorum*, *Baker* [Filices-Polypodiaceæ]; ad *A. sylvaticum*, Presl., magis accedit; differt pinnis angustioribus, venulis 2-3-jugis et soris inter costam et marginem uniseriatis.

Caudex erectus; paleæ basilares lineares, densissimæ, atro-brunnæ, membranaceæ, magnæ. *Stipites* erecti, 3-4 poll. longi, paleis squarrosis vestiti. *Lamina* oblongo-lanceolata, ad basin attenuata, 12-15 poll. longa, medio 6-7 poll. lata, membranacea, viridis, glabra; rhachis primaria inferne paleacea; pinnæ sessiles, lanceolatae, profunde crenatæ, centrales 3- $3\frac{1}{2}$ poll.

longæ, inferne 6-7 lin. latæ; inferiores sensim minores; infimæ deflexæ; venæ pinnatæ, venulis ascendentibus 2-3-jugis. *Sori* lineares, basales, inter costam et marginem uniseriati. *Indusium* angustum, membranaceum, glabrum, sæpe diplazioidium.

CHINA. Yunnan: mountain forests to the east of Mengtze, at 6000 ft., *Henry*, 10,103.

377. *Asplenium* (*Diplazium*) *leptophyllum*, *Baker* [Filices-Polypodiaceæ]; inter *A. squamigerum*, *Mett.*, et *A. latifolium*, *D. Don*, medium tenens.

Caudex erectus; paleæ basilares lanceolatae, castaneæ. *Stipites* debiles, erecti, sesquipedales, nudi vel parce paleacei. *Lamina* magna, deltoidea, tripinnatifida, membranacea, viridis, glabra; pinnae inferiores reliquis majores, petiolatae, deltoideæ, 8-10 poll. longæ; pinnulae sessiles, oblongo-lanceolatae, profunde pinnatifidæ, segmentis tertiariis oblongis obtusis serratis 2-3 lin. latis; venæ in segmentis tertiariis copiose pinnatæ, venulis inferioribus furcatis. *Sori* ad costam approximati, lineares, 2 lin. longi. *Indusium* glabrum, membranaceum, viridulum, persistens.

CHINA. Yunnan: Szemao, in forests, *Henry*, 13,106.

378. *Nephrodium* (*Lastrea*) *cyclodioides*, *Baker* [Filices-Polypodiaceæ]; ad *N. podophyllum*, *Hook.*, magis accedit; differt pinnis multo majoribus, venulis 5-6-jugis et soris minutis.

Stipites ignoti. *Lamina* magna, rhomboidea, simpliciter pinnata, chartacea, utrinque viridis, glabra; costa straminea, nuda; pinnae 3-jugæ, sessiles, ascendentes, lanceolatae, 9-12 poll. longæ, medio 18-21 lin. latæ, acutæ, basi cuneatæ, ad apicem obscure serratæ. Venæ pinnatæ, liberæ, venulis remotis ascendentibus 5-6-jugis. *Sori* globosi, minuti, superficiales, ad venas mediales positi. *Indusium* parvum, glabrum, evanescens.

CHINA. Yunnan: Mengtze, mountains above the Red river, at 7000 ft., *Hancock*, 155.

379. *Nephrodium* (*Lastrea*) *microlepis*, *Baker* [Filices-Polypodiaceæ]; a *N. hirtipede*, *Hook.*, recedit pinnis ad medium pinnatifidis et indusio parvo evanescente.

Caudex erectus. *Paleæ* basilares lanceolatae, magnæ, membranaceæ, pallide brunneæ. *Stipites* subpedales, straminei, parce paleacei. *Lamina* oblongo-lanceolata, bipinnatifida, 15-18 poll. longa, 5-6 poll. lata, papyracea, utrinque viridis, glabra; rhachis primaria paleis lineari-subulatis brunneis vestita; pinnae lanceolatae, ad medium pinnatifidæ, centrales $2\frac{1}{2}$ -3 poll. longæ, 8-2 lin. latæ; basales haud reductæ; lobi oblongi, obtusi, obscure crenati, 2 lin. lati; venæ pinnatæ, venulis simplicibus ascendentibus 4-5-jugis. *Sori* mediales. *Indusium* parvum, membranaceum, evanescens.

CHINA. Yunnan: forests to the south of Szemao, at 5000 ft., *Henry*, 13,154.

380. *Nephrodium* (*Eunephrodium*) *subelatum*, Baker [Filices-Polypodiaceæ]; ad *N. elatum*, Baker (*N. mauritianum*, Fée,) accedit; differt pinnis minus sectis et indusio persistente magnitudine mediocri.

Rhizoma repens; paleæ basilares lanceolatae, densae, sordide brunneae. *Stipites* pedales et ultra, pubescentes, facie canaliculati, infra parce paleacei. *Lamina* oblonga, tripinnatifida, 2-3 pedes longa, medio 12-15 poll. lata, chartacea, utrinque viridis, facie ultra costas glabra, dorso ubique pubescens; rhachis primaria pubescens, haud paleacea; pinnæ sessiles, lanceolatae, centrales 7-8 poll. longae, infra 12-13 lin. latae, ad medium haud pinnatifidae, lobis oblongis 2 lin. latis; infimæ remotæ, valde reductæ; venulæ simplices, perspicuæ, 10-12-jugæ. *Sori* mediales *Indusium* firmum, glabrum, persistens.

CHINA. Yunnan: Szemao, rare at 4000 ft., Henry, 11,809.

381. *Nephrodium* (*Sagenia*) *Morsei*, Baker [Filices-Polypodiaceæ]; ad *N. tripartitum*, Baker, accedit, differt stipitibus pallidis et soris minoribus ad venas primarias magis approximatis.

Caudez ignotus; paleæ basilares lanceolatae, firmulae, sordide brunneae. *Stipites* 6-15 poll. longi, straminei, graciles, supra basin nudi. *Lamina* deltoidea, 6-8 poll. longa, viridis, dorso pilosa, profunde trilobata, lobo centrali quam basilaribus majore integro vel crenato ovato acuminato $2\frac{1}{2}$ -3 poll. lato; venæ primariæ ad marginem productæ, parallelæ; areolæ intermediae copiosae, venulis liberis productis. *Sori* biseriales, ad venas primarias approximati. *Indusium* firmum, glabrum.

CHINA. Kiang-si: Lungchow, Morse, 51.

382. *Nephrodium* (*Sagenia*) *yunnanense*, Baker; [Filices-Polypodiaceæ]; inter *N. latifolium*, Baker, et *N. cicutarium*, Baker, medium tenens.

Stipites elongati, graciles, subnudi, castanei; paleæ lineares, brunneae, membranaceae. *Lamina* deltoidea, magna, membranacea, bipinnatifida, utrinque viridis, facie glabra, dorso ad costam castaneam pubescens; pinnæ infimæ deltoideae, pedales et ultra, ad latus inferius productæ, breviter petiolatae, profunde pinnatifidae, lobis secundariis plerisque ovato-lanceolatis acutis integris, infimis sinuatis vel pinnatifidis; venæ primariæ erecto-patentes, margini parallelæ; venulæ copiose in areolas hexagonas anastomosantes, venulis liberis inclusis. *Sori* superficiales, inter costam et marginem 1-2-seriati. *Indusium* membranaceum, glabrum, persistens.

CHINA. Red river mountains, Mengtze, Yunnan, Hancock, 193.

383. *Nephrodium* (*Sagenia*) *leptophyllum*, C. H. Wright [Filices-Polypodiaceæ]; ad *N. singaporianum*, Baker, accedit; soris majoribus paucioribus recedit.

Frondes caespitosae, lanceolatae, indivisae, 9 poll. longae, 1-1½ poll. latae, tenuiter membranaceae, glabrae, basi longe attenuatae,

marginibus leviter undulatis. Stipites breves, paleis brunneis angustis sparse instructi. Venæ primariæ marginem attingentes. Sori diffusi. *Indusia* 1 lin. diametro.

TONKIN. Laokai, *Wilson*, 24.

384. *Polypodium* (*Phegopteris*) *crinitum*, *Baker* [Filices-Polypodiaceæ]; a speciebus reliquis hujus subgeneris recedit frondibus simpliciter pinnatis, stipitibus rhachidibusque dense paleaceis.

Caudex erectus; paleæ basilares lanceolatæ, densæ, magnæ, membranaceæ, brunneæ. *Stipites* pallidi, 9–15 poll. longi, paleis lanceolatis et linearibus squarrosis membranaceis brunneis dense vestiti. *Lamina* oblongo-deltaidea, simpliciter pinnata, 12–15 poll. longa, 9–10 poll. lata, modice firma, utrinque viridis, facie glabra, dorso minute paleacea; rhachis primaria pallida, ad apicem dense paleacea; pinnæ lanceolatæ, sessiles, supra serrulatæ, ad basin in latere superiore leviter productæ, auriculatæ, inferiores $4\frac{1}{2}$ –5 poll. longæ, 9–10 lin. latæ; venæ liberæ, parce pinnatæ. Sori parvi, superficiales, globosi, inter costam et marginem 1–2-seriati.

CHINA. Yunnan: Mengtze, in mountain ravines, at 4500 ft., very rare, *Henry*, 11,557.

385. *Polypodium* (*Phegopteris*) *viscosum*, *C. H. Wright* [Filices-Polypodiaceæ]; ad *P. obscurum*, Hook., accedit; frondibus ovatis glandulosis et pinnarum lobis serratis differt.

Stipites cæspitosi, ebenacei, 4 poll. longi, paleis paucis subulatis basi instructi. *Lamina* ovata, acuminata, pinnata, 8 poll. longa, $4\frac{1}{2}$ lin. lata, ad rhachin nervosque glanduloso-pilosa; pinnæ oblongæ, acuminatæ, $2\frac{1}{2}$ poll. longæ, 9 lin. latæ, dilute virides, pinnatipartitæ, 2 infimæ deflexæ; lobi obtusi, obliqui, serrati; venæ simplices rarius furcatæ. Sori sæpius in utroque costæ latere uniseriati.

TONKIN. Laokai, *Wilson*, 36.

386. *Polypodium* (*Eupolypodium*) *convolutum*, *Baker* [Filices-Polypodiaceæ]; ad *P. achilleæfolium*, Kaulf., accedit, recedit frondibus angustioribus et lobis pinnarum ovatis obtusis.

Caudex erectus. *Stipites* capillares, cæspitosi, 1 poll. longi, paleis subulatis patulis brunneis vestiti. *Lamina* lanceolata, bipinnatifida, 3–6 poll. longa, medio 6–9 lin. lata, basin versus attenuata, membranacea, elastica, utrinque viridis, facie glabra, dorso pilosa; pinnæ contiguæ, sessiles, lanceolatæ, centrales 4–5 lin. longæ, $1\frac{1}{2}$ lin. latæ, lobis ovatis obtusis; pinnæ basilares sensim minores; venæ in lobis pinnarum simplices, centrales, apicem haud attingentes. Sori globosi, superficiales, ad basin loborum solitarii.

CHINA. Yunnan: Ten Chen Liu Mountains, on trees, at 8000 ft., *Henry*, 10,186.

387. *Polypodium* (*Eupolypodium*) *trichophyllum*, Baker [Filices-Polypodiaceæ]; ad *P. repandulum*, Mett., magis accedit; differt frondibus ubique pilosis et pinnis ad medium pinnatifidis.

Stipites brevissimi, dense cæspitosi, sordide brunnei, pilis patulis stramineo-brunneis dense vestiti. *Lamina* elastica, pendula, lanceolata, 6-9 poll. longa, medio 10-12 lin. lata, simpliciter pinnata, basin versus sensim attenuata, utrinque viridis, longe pilosa; pinnæ lineares, multijugæ, 1 lin. latæ, basi adnatæ, ad medium pinnatifidæ, lobis erecto-patentibus ovato-deltaideis obtusis; costa immersa, concolor. *Venæ* simplices, breves, erecto-patentes, perspicuæ. *Sori* globosi, superficiales, ad costas approximati, laxè dispositi.

CHINA. Yunnan: Mengtze, damp forests above the Red River at 7000 ft., on trees, *Hancock*, 153.

388. *Polypodium* (*Eupolypodium*) *simulans*, Baker [Filices-Polypodiaceæ]; habitus omnino *P. (Goniophlebium) microrhizomatis*, C. B. Clarke (Bedd. Fil. Brit. Ind. t. 384); differt venis liberis *Eupolypodii*.

Rhizoma gracile, repens, epigæum, paleis ovatis acutis imbricatis sordide brunneis vestitum. *Stipites* segregati, erecti, breves, straminei, nudi. *Lamina* lanceolata, simpliciter pinnata, 1 pedalis, 2-2½ poll. lata, firmula, utrinque viridis, glabra; rhachis straminea, gracilis, nuda; pinnæ lineares, 15-18 lin. longæ, 2 lin. latæ, integræ, ad basin adnatæ, infimæ haud reductæ; costa gracilis, nigra. *Venæ* erecto-patentes, perspicuæ, furcatæ, ad marginem haud productæ. *Sori* parvi, globosi, superficiales, inter costam et marginem mediales uniseriati.

CHINA. Yunnan: Mengtze, on limestone rocks, at 6000-7000 ft., *Hancock*, 152.

389. *Polypodium* (*Phymatodes*) *xiphiopteris*, Baker [Filices-Polypodiaceæ]; ad *P. longifolium* Mett., accedit; differt frondibus angustioribus et soris globosis superficialibus intramarginalibus.

Rhizoma gracile, late repens; paleæ basilares parvæ, lanceolatæ, membranaceæ, nigrae, clathratæ. *Stipites* brevissimi, nudi vel subnulli. *Lamina* simplex, lanceolata, 15-18 poll. longa, medio 6-8 lin. lata, acuminata, ad basin angustata, subcoriacea, rigidula, utrinque viridis, glabra; costa pallida; venæ immersæ, occultæ. *Sori* globosi, superficiales, ad marginem approximati, inter costam et marginem uniseriati.

CHINA. Yunnan: mountains to east of Mengtze, at 6000 ft., *Henry*, 11,826.

390. *Polypodium* (*Phymatodes*) *intramarginale*, Baker [Filices-Polypodiaceæ]; ad *P. longifolium* Mett., accedit; differt frondibus papyraceis longe stipitatis et soris globosis minus immersis.

Rhizoma gracile, late repens, hypogæum, paleis nullis. *Stipites* graciles, pallidi, nudi, 6-8 poll. longi. *Lamina* simplex, lanceolata, papyracea, 15-18 poll. longa, medio 18-21 lin. lata, acuminata, ad basin angustata, utrinque viridis, glabra, costa pallida,

nuda ; venæ primariæ perspicuæ, ascendentes ; areolæ intermediæ parvæ, copiosæ. *Sori* globosi, leviter immersi, ad marginem approximati, inter costam et marginem uniseriati, haud contigui.

CHINA. Yunnan : Mengtze, mountain woods, on trees, at 6000 ft., *Henry*, 10,042.

391. *Polypodium* (*Phymatodes*) *mengtzeanum*, *Baker* [Filices-Polypodiaceæ] ; inter *P. linearem*, Thunb., et *P. macrosphaeram*, *Baker*, medium tenens.

Rhizoma gracile, repens ; paleæ basilares lanceolatae, membranaceæ, nigrae, clathratae. *Lamina* simplex, lanceolata, 12-18 poll. longa, medio 7-10 lin. lata, acuminata, integra, ad basin angustata, rigidula, utrinque viridis, glabra, costa pallida ; venæ immersæ, occultæ. *Sori* globosi, superficiales, remoti, inter costam et marginem uniseriati, ad marginem quam ad costam magis approximati, in dimidio superiore frondis solum enati.

CHINA. Yunnan : mountains to the east of Mengtze, at 6000 ft., *Henry*, 11,827.

392. *Polypodium* (*Pleuridium*) *micropteris*, *Baker* [Filices-Polypodiaceæ] ; ad *P. Lanceolam*, Mett., accedit ; differt frondibus papyraceis obtusis, venis primariis ad marginem haud productis et soris 1-2-seriatis.

Rhizoma gracile, repens ; paleæ basilares lanceolatae, firmulae, sordide brunneæ. *Stipites* 1-2 poll. longi, minute paleacei. *Lamina* simplex, oblongo-lanceolata, 2-3 poll. longa, medio 8-12 lin. lata, integra, obtusa, basi cuneata, utrinque viridis, glabra, dorso ad costam paleacea ; venæ primariæ ad marginem haud productæ ; areolæ copiosæ, venulis liberis inclusis interdum productis. *Sori* superficiales, globosi, inter costam et marginem 1-2-seriati.

CHINA. Yunnan : mountains to the east of Szemao, in shade, at 6000 ft., *Henry*, 12,630.

393. *Antrophyum* *petiolatum*, *Baker* [Filices-Polypodiaceæ] ; ab *A. plantagineo*, Kaulf., recedit frondibus longe petiolatis obovato-cuneatis cuspidatis.

Caudex erectus ; paleæ basilares lineares, densæ, brunneæ, membranaceæ. *Stipites* nudi, viriduli, 4-5 poll. longi. *Lamina* obovato-cuneata, cuspidata, 4-5 poll. longa, 2-2½ poll. lata, subcoriacea, utrinque viridis, glabra ; venæ verticales, interdum anastomosantes. *Sori* copiosi, in vittis verticalibus immersi.

CHINA, Yunnan : mountains to the east of Mengtze, at 6000 ft., *Henry*, 9153.

394. *Acrostichum* (*Polybotrya*) *sinense*, *Baker* [Filices-Polypodiaceæ] ; ab *A. appendiculato*, Willd., recedit lobis pinnarum latoribus et setis inter lobos haud productis.

Rhizoma breviter repens. *Stipites* contigui, graciles, pallidi, nudi vel obscure paleacei, frondium sterilium 6-8 poll. longi,

frondium fertilium multo longiores. *Lamina sterilis* oblongo-lanceolata, bipinnatifida, 6-18 poll. longa, 6-8 poll. lata, membranacea, viridis, glabra, interdum ad apicem producta radicansque; pinnae lanceolatae, sessiles, ad medium pinnatifida, lobis oblongis obtusis 2 lin. latis; pinnae infimae haud reductae; venae liberae, in lobis pinnarum pinnatae, venulis ascendentibus 5-6-jugis, inferioribus furcatis. *Lamina fertilis* pinnis lineari-lanceolatis obtusis minoribus remotioribus subintegris instructa.

CHINA. Yunnan: forests of Szemao, on shaded cliffs, *Henry*, 12,494.

395. *Lycopodium* (Selago) *Henryi*, *Baker* [Lycopodiaceae]; ad *L. taxifolium*, Sw., magis accedit; differt foliis oblongis acutis $1\frac{1}{2}$ lin. latis.

Caules erecti, caespitosi, graciles, straminei, semipedales, simplices vel furcati. *Folia* plana, subcoriacea, rigidula, oblongo-lanceolata, acuta, 3-4 lin. longa, $1\frac{1}{2}$ lin. lata, ad apicem distincte costata, superiora vix reducta. *Sporangia* parva, straminea, ad axillas foliorum superiorum.

CHINA. Yunnan: forests of Szemao, on trees, at 5000 ft., *Henry*, 11,551.

396. *Asplenium* (Anisogonium) *macrodictyon*, *Baker* in Kew Bulletin, 1901, p. 144. The specific name being preoccupied (*see* Journ. of Bot., 1877, p. 163), it is proposed to substitute for it the name *A. Sanderi*, *Baker*.

II.—DIAGNOSES AFRICANÆ, XIV.

756. *Muraltia ecornuta*, *N. E. Brown* [Polygalaceae]; affinis *M. Flanaganii*, Bolus, sed gracilior et foliis angustioribus.

Rami graciles, minutissime scaberuli. *Folia* 2-3 lin. longa, $\frac{1}{4}$ - $\frac{1}{2}$ lin. lata, linearia, subobtusa, minute apiculata, plana, glabra. *Flores* solitarii, axillares, folia subaequant, pedicellati, glabri, carnei. *Sepala interiora* 1 lin. longa, elliptico-oblonga, obtusa, uninervia. *Petala lateral*ia $1\frac{1}{2}$ lin. longa, lineari-oblonga, obtusa, basi carinae adnata. *Carina* $1\frac{3}{4}$ lin. longa, recta, apice bilobulata, lobulis plicatis obtusis. *Capsula* 2 lin. longa, $1\frac{1}{2}$ lin. lata, elliptica, obtusissima, apice incisa.

ORANGE RIVER COLONY. Manyenyeza Mountain, near Van Reenens Pass, at 6000-7000 ft., *Wood*, 5699.

757. *Hermannia longifolia*, *N. E. Brown* [Sterculiaceae]; affinis *H. Woodii*, Schinz, sed foliis longioribus angustioribus et petalis breviter exsertis differt.

Rami procumbentes, stellato-scabridi. *Folia* petiolata, $1\frac{3}{4}$ - $3\frac{1}{2}$ poll. longa, 4-9 lin. lata, anguste oblonga vel lineari-oblonga, apice

subattenuata, acuta, dentata, utrinque parce stellato-scabrida; stipulæ 2-3 lin. longæ, lanceolatæ, acutæ. *Pedunculi* axillares, 2-2½ poll. longi, stellato-scabridi, biflori; bracteæ 2½-3 lin. longæ, lineari-subulatæ; pedicelli 1½-7 lin. longi. *Calyx* campanulatus, 4-5 lin. longus, ad medium 5-dentatus, stellato-subtomentosus, vix scabridus, dentibus deltoideis acutis. *Petala* 5-5½ lin. longa, 2¼-2½ lin. lata, basi cymbiformia, utrinque pubescentia, superne elliptico-oblonga, extra glabra, intus papillosa, lutea. *Stamina* inclusa; filamenta supra medium transversim tuberculata, tuberculis villosopubescentibus. *Ovarium* obovoideum, 5-sulcatum, pubescens; stylus glaber.

NATAL. Near Wessels Nek, at 3700 ft., *Wood*, 5701.

758. *Celastrus concinnus*, *N. E. Brown* [Celastraceæ]; affinis *C. nemorosus*, Eckl. et Zeyh., a qua foliis minoribus et pedunculis capillaribus facile distinguitur.

Frutex omnino glaber, spinosus. *Rami* angulares, spinis rectis 1-1½ poll. longis armati. *Folia* rotundata, ovata vel lanceolata, obtusa, serrulata, petiolo 1-2 lin. longo, lamina ½-1½ poll. longa, ¼-poll. lata. *Cymæ* 1-3, axillares, parvæ, 2-3-floræ, pedunculis capillaribus 2½-7 lin. longis; bracteæ minutæ; pedicelli 1-1½ lin. longi. *Sepala* orbiculata, obtusa, ⅓ lin. diam., minute ciliata. *Petala* ¾ lin. longa, ⅔ lin. lata, elliptica, obtusa, minutissime et irregulariter denticulata, alba. *Ovarium* 3-loculare, loculis 2-ovulatis; stylus ¼ lin. longus; stigmata ¼ lin. longa, linearia, recurva.

NATAL. Edge of a wood near Lidgetton, at 3000-4000 ft., *Wood*, 6336; Inanda, *Wood*, 1395.

759. *Celastrus albus*, *N. E. Brown* [Celastraceæ]; species distinctissima, foliis subtus albis.

Rami primum albidii, demum cinerei, glabri. *Folia* 1¼-2 poll. longa, 7-17 lin. lata, elliptica vel ovata, obtusa vel acuta, denticulata, breviter petiolata, supra viridia, subtus albata, glabra. *Flores* ad axillas fasciculati; pedicelli 2½-3 lin. longi, infra medium articulati, graciles, glabri. *Sepala* ½ lin. longa, late ovata vel rotundata, acuta vel obtusa, ciliato-denticulata. *Petala* 1¼ lin. longa, 1 lin. lata, elliptica, obtusa, margine crispata, lutea. *Ovarium* glabrum, 3-loculare, loculis 2-ovulatis; stylus vix ¼ lin. longus; stigmata minuta.

NATAL. At the edge of a wood near Van Reenens Pass, at 5000-6000 ft., *Wood*, 6362.

760. *Pterocelastrus echinatus*, *N. E. Brown* [Celastraceæ]; affinis *P. stenoptero*, Walp., sed pedunculis longioribus et fructibus magis echinatis differt.

Frutex omnino glaber. *Folia* alterna, brevissime petiolata, ¾-2 poll. longa, 4-11 lin. lata, lanceolata vel oblongo-obovata, apice obtusa vel leviter emarginata, basi cuneato-acuta. *Cymæ* parvæ,

axillares (immaturas tantum vidi), pedunculis 2-3 lin. longis. *Fructus* 3 lin. longus, $2\frac{1}{2}$ -3 lin. diam., ellipsoideus vel globosus, grosse echinatus.

NATAL. Province of Zululand; 'Nkandhla, *Haygarth in Herb. Wood.*, 7538.

761. *Rhus cuneata*, *N. E. Brown* [Anacardiaceæ-Anacardiæ]; affinis *R. crenata*, Thunb., sed foliis subtus eglandulosis facile distinguitur.

Frutex ramosus, ramis pubescentibus cinereis. *Folia* petiolata, 3-foliolata; foliola elongato-cuneato-obovata, apice obtusa tridentata vel emarginata, basi anguste cuneata, glabra, subtus pallidiora, eglandulosa; intermedium $\frac{1}{2}$ -1 $\frac{1}{4}$ poll. longum $2\frac{1}{2}$ -6 lin. latum; lateralibus quam intermedium breviora sed subæquilata; petiolus 2-7 lin. longus, pubescens, canaliculatus vel angustissime alatus. *Panicula* (immaturas tantum vidi) 1-3 poll. longæ, terminales, multifloræ, subfloccoso-pubescentes.

NATAL. On a rocky hill near Ladysmith, at 3300 ft. *Wood*, 5706.

762. *Pyrenacantha* ? *kamassana*, *Baill. in Adansonia*, x. 272 [Olacineæ]. Adde:—(descriptionem imperfectam amplificavit *C. H. Wright*).

Folia quinquelobata, basi cordata, velutina, sparse dentata, $1\frac{1}{4}$ poll. longa, $1\frac{1}{2}$ -2 poll. lata; petiolus 1 poll. longus, dense appresseque hirsutus. *Spica* mascula 1 poll. longa, densiflora, axillaris vel supra-axillaris; pedunculus 2 poll. longus, appresse hirsutus. *Perianthium* 1 lin. diam.; lobi breviter triangulares, extus hirsuti. *Filamenta* complanata; antheræ filamentis æquilongæ.

RHODESIA. Boruma, *Menyharth*, 819.

763. *Lotononis Haygarthii*, *N. E. Brown* [Leguminosæ-Genistæ]; affinis *L. sessilifolia*, Harv., foliis petiolatis tenuiter appresse villosis et floribus majoribus differt.

Planta perennis basi lignosa. *Caules* erecti, apicem versus tantum 1-2-ramosi, appresse villosi, usque ad apicem dense foliosi. *Folia* petiolata, trifoliolata, erecta; petiolus 1-2 lin. longus; foliola 6-11 lin. longa, $1\frac{1}{4}$ -2 $\frac{1}{2}$ lin. lata, anguste cuneato-oblongata, apice mucronata, basi acuta, utrinque parce appresse villosa. *Racemus* terminalis, subsessilis, erectus, 1-1 $\frac{1}{4}$ poll. longus, 9-10 lin. diam., densus; bractæ $1\frac{1}{2}$ -2 lin. longæ, lanceolatae, acutæ, appresse pubescentes; pedicelli 1-1 $\frac{1}{4}$ lin. longi, appresse pubescentes, apice bibracteolati; bracteolæ $1\frac{1}{4}$ -1 $\frac{1}{2}$ lin. longæ, subulatae, acutæ. *Calyx* 3-3 $\frac{1}{4}$ lin. longus, campanulatus, appresse pubescens, dentibus lateralibus $1\frac{1}{4}$ lin. longis usque ad $\frac{2}{3}$ connatis. *Corolla* lutea; vexillum $5\frac{1}{2}$ -6 lin. longum, 3 $\frac{1}{2}$ lin. latum, orbiculatum, obtusum, unguiculatum, rectum, marginibus reflexis, dorso pubescens; alæ 6 lin. longæ, 2 lin. latae, spathulato-obovatae,

obtusæ, longe unguiculatæ, concavæ vel subcomplicatæ, glabræ ; carina 5 lin. longa, stricta, obtusa, glabra. *Ovarium* dense sericeum ; stylus glaber, rectus.

NATAL. Province of Zululand : Nkandhla, *Haygarth in Herb. Wood.*, 7460.

764. *Lotononis adpressa*, *N. E. Brown* [Leguminosæ-Genistæ] ; similis *L. molli*, Benth., a qua foliis lanceolato-oblongis et calyce angustiore differt.

Planta perennis, multiramosa, ramis prostratis 2-6 poll. longis basi lignosis pubescentibus. *Folia* petiolata, trifoliolata, molliter sericeo-tomentosa ; petiolus $1\frac{1}{2}$ - $2\frac{1}{2}$ lin. longus ; foliola $1\frac{1}{2}$ -3 lin. longa, $\frac{3}{4}$ - $1\frac{1}{4}$ lin. lata, subæqualia oblongo-lanceolata, acuta ; stipulæ solitariae, $1\frac{1}{2}$ - $2\frac{1}{2}$ lin. longæ, $\frac{2}{3}$ -1 lin. latæ, oblongo-lanceolatae, breviter petiolulatae. *Flores* axillares, solitarii, brevissime pedicellati. *Calyx* anguste campanulatus, infra medium dentatus, appresse pubescens, dentibus subulato-acuminatis. *Corolla* 4 lin. longa, lutea, appresse pubescens ; vexillum ellipticum, acutum, unguiculatum ; alæ oblongæ, obtusæ, basi semihastatæ, unguiculatæ ; carina obtusa. *Ovarium* 5-ovulatum ; stylus glaber.

NATAL. On a stony hill near Charlestown, at 5000-6000 ft., *Wood*, 5712.

765. *Argyrolobium reflexum*, *N. E. Brown* [Leguminosæ-Genistæ] ; species affinis *A. polyphylo*, Eckl. and Zeyh., sed gracilior, floribus minoribus et calyce multo brevior.

Fruticulus erectus, ramosus, ramis gracilibus strictis ascendentibus minute appresso-pubescentibus. *Folia* petiolata, trifoliolata, exstipulata ; petiolus $1\frac{1}{2}$ -2 lin. longus, appresse pubescens ; foliola 2- $5\frac{1}{2}$ lin. longa, 1- $1\frac{1}{2}$ lin. lata, cuneato-oblonga, obtusa, subapiculata, basi acuta, supra glabra, subtus tenuiter appresse pubescentia. *Racemi* terminales, 2-3-flori, 4-6 lin. longi, appresse pubescentes ; bractæ $\frac{3}{4}$ -1 lin. longæ, subulatæ ; pedicelli 1- $1\frac{1}{2}$ lin. longi. *Calyx* 2 lin. longus, ad medium bilabiatus, tenuiter appresse pubescens, labio superiore acute bidentato, labio inferiore acute tridentato. *Corolla* lutea, linea in vexilli facie externa excepta glabra ; vexillum 4 lin. longum, abrupte reflexum subrotundatum, obtusissimum, complicatum, unguiculatum ; alæ $3\frac{1}{2}$ lin. longæ, oblongæ, obtusæ, basi auriculatæ, unguiculatæ ; carina $4\frac{1}{2}$ lin. longa, obtusa, glabra. *Legumen* lineare, 9 lin. vel ultra longum, compressum, glabrum, dorso ciliatum.

NATAL. Province of Zululand ; Ungoya, at 1000-2000 ft., *Wylie in Herb. Wood.*, 5688.

766. *Argyrolobium variopile*, *N. E. Brown* [Leguminosæ-Genistæ] ; species affinis *A. longipedi*, *N. E. Brown*, a qua indumento et foliis longe petiolatis facile distinguitur.

Herba perennis, ramis gracilibus decumbentibus, pilis diffusis minutissimis appressis et pilis longis patentissimis paucis obtectis. *Folia* petiolata, trifoliolata ; petiolus 2-10 lin. longus, filiformis ; foliola 3-6 lin. longa, $1\frac{1}{2}$ - $3\frac{1}{2}$ lin. lata, obovata, obtusa,

sessilia, supra glabra, subtus pilis minutis vel elongatis et appressis vel longis patentibusque parce oblecta; stipulæ 1-4 lin. longæ, $\frac{1}{2}$ -2 lin. latæ, ovatæ vel oblongo-lanceolatæ, acutæ. *Pedunculi* foliis oppositi, 1-2-flori, graciles, $\frac{1}{2}$ -2 $\frac{1}{2}$ poll. longi, pilis variis parce oblecti; bractææ minutæ, subulatæ, appressæ. *Calyx* 3 lin. longus, pilis variis parce oblectus; tubus brevissimus, $\frac{3}{4}$ lin. longus; lobi lanceolati, acuminati, duo superiores fere liberi, tres inferiores usque ad medium connati. *Corolla* lutea; vexillum 4 lin. longum et latum, orbiculato-reniforme, apicæ parce pubescens; alæ 3 lin. longæ, oblongæ, obtusæ, basi auriculatæ, unguiculatæ, glabræ; carina 3 $\frac{1}{2}$ lin. longa, obtusa, glabra. *Legumen* $\frac{3}{4}$ -1 poll. longum, 1 $\frac{1}{4}$ lin. latum, lineare, villosum.

NATAL. On a hill side near Charlestown, at 5000-6000 ft. Wood, 5693, 6355.

767. *Indigofera longipes*, N. E. Brown [Leguminosæ-Galegeæ]; affinis *I. fastigiata*, E. Meyer, a qua calyce minore et corolla pubescente facile distinguitur.

Caules erecti, simplices, 1 $\frac{1}{2}$ -2 ped. alti, graciles, leviter angulati, appresse canescenti-strigosi. *Folia* 1-1 $\frac{1}{2}$ poll. longa, imparipinnata; foliola 3-4-juga, opposita, 4-9 lin. longa, $\frac{1}{2}$ - $\frac{2}{3}$ lin. lata, linearia, acuta, complicata, utrinque appresse strigosa; stipulæ $\frac{3}{4}$ -1 lin. longæ, setiformes. *Racemi* longe et graciliter pedunculati, usque ad 7 poll. longi; bractææ caducæ, 1 lin. longæ; pedicelli 1 $\frac{1}{2}$ lin. longi, capillares. *Calyx* 1 $\frac{1}{4}$ lin. longus, infra medium 5-dentatus, appresse canescente-strigosus, dentibus subulatis. *Corolla* alba; vexillum 2 $\frac{1}{4}$ lin. longum et latum, orbiculare, obtusum, sessile, dorso brunneo-pubescens; alæ 2 $\frac{1}{4}$ lin. longæ, 1 lin. latæ, oblongo-obovatæ, subfalcatæ, obtusæ, pubescentes, ciliatæ; carina 2 $\frac{1}{4}$ lin. longa, obtusa, pubescens, ciliata, utrinque ad medium acute calcarata. *Ovarium* glabrum.

NATAL. On a stony hill near Ladysmith, at 3400 ft., Wood, 5727.

768. *Crassula Barklyi*, N. E. Brown [Crassulacæ]; affinis *C. columnari*, Linn. f., sed minor, et foliis tenuioribus ciliatis suberectis, etiam differt.

Planta $\frac{1}{2}$ -1 poll. alta, pyramidalis. *Caulis* simplex vel basi ramosus, foliis dense oblectus. *Folia* adscendentia, arcte imbricata, decussata, 2-2 $\frac{1}{2}$ lin. longa, 4-6 lin. lata, lunata, amplexicaulia, obtusissima, glauca, margine tenui acuta ciliata. *Flores* terminales, capitulati, subsessiles. *Sepala* 1 $\frac{1}{3}$ -1 $\frac{1}{2}$ lin. longa, $\frac{1}{3}$ - $\frac{1}{2}$ lin. lata, lineari-spathulata, obtusa, glabra, ciliolata. *Corolla* gamopetala, 5-lobata, tubus 1 lin. longus; lobi 2 $\frac{1}{2}$ lin. longi, $\frac{1}{2}$ lin. lati, lineares, obtusi, crassuli, dorso leviter carinati, erecti, glabri. *Stamina* 5 ore tubi inserta; filamenta $\frac{1}{2}$ lin. longa; antheræ $\frac{1}{2}$ lin. longæ, oblongæ. *Squamæ hypogynæ* $\frac{1}{2}$ lin. longæ, erectæ, lineari-cuneatæ, truncatæ, intra canaliculatæ. *Carpella* 5, basi connata, erecta, stricta, subteretia superne vix angustata.

CAPE COLONY. Little Namaqualand, Sir H. Barkly.

769. *Crassula sedifolia*, N. E. Brown [Crassulaceæ]; affinis *C. Cooperi*, Regel, sed glabra; etiam foliis tereto-subclavatis nec supra planis differt.

Planta herbacea, $1\frac{1}{2}$ – $2\frac{1}{4}$ poll. alta. *Caules* e basi plures, glabri, erecti, ad nodos leviter constricti. *Folia* radicalia conferta, 5–6 lin. longa, $1\frac{1}{4}$ – $1\frac{1}{2}$ lin. crassa, tereto-subclavata, acuta, carnosae, glabra, obscure impresso-maculata, lineis duabus papillarum cartilaginearum subciliata; folia caulina 3–6 lin. distantia, sessilia nec connata, $1\frac{1}{2}$ – $2\frac{1}{2}$ lin. longa, turgida, acuta. *Cymæ* terminales. 2–10-floræ, laxæ. *Pedicelli* $2\frac{1}{2}$ –5 lin. longi, glabri. *Sepala* $\frac{1}{2}$ – $\frac{3}{4}$ lin. longa, oblonga, subacuta, glabra. *Petala* 5, alba, 2 lin. longa, $\frac{3}{4}$ lin. lata, oblonga, obtusa, plana, dorso apice minute apiculata. *Antheræ* luteæ.

SOUTH AFRICA. Precise locality unknown.

Described from living plants flowering at Kew in August, 1900, which were received from Prof. MacOwan in 1899.

770. *Begonia calabarica*, Stapf [Begoniaceæ]; affinis *B. quadrilata*, Warb., sed foliis basi cordatis latioribus, ovario breviori latioreque nec non et petiolis et pedunculis et stylis brevioribus diversa.

Herba subcaulis. *Caulis* brevis, prostratus, saturate viridis, circa squamarum vel foliorum bases pilosus, cæterum glaber. *Foliorum* petioli $1\frac{1}{2}$ –2 poll. longi, patule hirsuto-villosi; laminæ peltatæ, oblique lateque cordato-ovatae, acutæ vel obtusæ, 2–3 poll. longæ lateque, obscure sinuato-dentatæ, præter margines rubescentes ciliato-fimbriatos subundulatos læte virides, supra glaberrimæ, infra primo in nervis molliter hirsutæ, deinde glabratae, nervis 6–8 furcatis radiantibus, umbone a sinu 3–4 lin. distante. *Pedunculus* petiolis similis, circiter 1 poll. longus, pauciflorus. *Flores* terminales, umbellati, 2 masculi pedicellati, 1 femineus subsessilis; bractæ oblongæ, ad 2 lin. longæ, integræ, vel sursum fimbriato-dentatæ. *Flores* ♂: pedicelli ad 6–7 lin. longi, parce pilosi; sepala 2, elliptico-rotundata, subaequalia, 5–6 lin. longa, extus parce pilosa, superum extus rubrum, intus basi rubrum, cæterum aureum, inferum utrinque flavum; petala 0; staminum filamenta basi in columnam brevem connata, parte libera antheris 1 lin. longis submarginatis paullo brevioribus. *Flos* ♀: pedicelli subnulli; sepala ut in ♂, sed paullo minora; petala 0; styli 4, basi breviter connati, 1 lin. longi; stigmata reniformia, papillarum serie continua, 1 lin. vel paullo ultra lata; ovarium sub anthesi viride, 7 lin. longum, ad 6 lin. latum, 4-alatum, alis rotundatis superne ad $2\frac{1}{2}$ lin. longis, inferne paullo angustioribus.

WEST TROPICAL AFRICA. Calabar.

Described from a plant in cultivation at Kew.

771. *Felicia Burchellii*, N. E. Brown [Compositæ-Asteroidææ]; affinis *F. petiolata*, N. E. Brown (*Asteri petiolato*, Harv.), sed foliis oppositis integris differt.

Herba perennis, suffruticosa (?). *Caules* decumbentes, ramosi, parce pubescentes. *Folia* opposita, petiolata, elliptica vel elliptico-

ovata, integra, utrinque obtusa, apice minute apiculata, supra glabra, subtus parce appresse pubescentia; petiolus $1\frac{1}{2}$ –3 lin. longus; lamina 3–10 lin. longa, 2–5 lin. lata. *Pedunculi* solitarii, terminales, 1–6 poll. longi, appresse puberuli. *Involucri* campanulati bracteæ biseriatæ, discum fere æquantes, $2\frac{1}{2}$ lin. longæ, $\frac{1}{2}$ lin. latæ, lineares, acutæ, pubescentes, apice ciliatæ. *Corollæ* radii $3\frac{1}{2}$ –4 lin. longæ, fere 1 lin. latæ, ligulatæ, subacutæ; corollæ disci $2\frac{1}{4}$ lin. longæ, tubulosæ, 5-dentatæ, glabræ. *Ovarium* tenuiter puberulum; pappi setæ scabridæ, albæ.

SOUTH AFRICA. Alexandria Division: on the rocks in Zwart-water Poort, *Burchell*, 3360, 3371.

772. *Vernonia scabrida*, *C. H. Wright* [Compositæ-Vernoniaceæ]; *V. Melleri*, Oliv. et Hiern, accedit, foliorum tomento et bractearum forma differt.

Caulis suffrutescens, leviter sulcatus, hispidus. *Folia* lineari-lanceolata, acuminata, supra scabro-pubescentia, subtus hispidotomentosa, 5 poll. longa, 5 lin. lata, marginibus revolutis. *Capitula* 1 poll. diam., corymbosim disposita. *Bracteæ* oblongæ, acuminatæ, mucronatæ, extus prope apicem rubido-tinctæ pilosæque, intus nitidæ. *Corolla* rubido-purpurea, 5 lin. longa. *Achenia* appresse hirsuta. *Pappus* stramineus; series exterior brevis; series interior 3–4 lin. longa, scabrida.

BRITISH CENTRAL AFRICA. Nyasaland: Namasi, *Cameron*, 41.

773. *Helichrysum Woodii*, *N. E. Brown* [Compositæ-Inuloideæ]; affine *N. Sutherlandi*, Harv., foliis lanatis et involucri squamis luteo-albidis basi viridi-vittatis facile distinguitur.

Fruticulus ramosus, basi lignosus. *Rami* basi dense superne laxè foliosi, dense lanati. *Folia* petiolata, orbiculata vel obovata, obtusissima, utrinque lanata, supra subviridia, subtus alba, trinervia; petiolus 1–2 lin. longus; lamina $\frac{1}{3}$ –1 poll. longa, 4–9 lin. lata. *Capitula* parva, 2 lin. longa et lata, 14–18-flora, dense cymoso-corymbosa. *Involucri* campanulati squamæ 4–5-seriatæ; interiores $1\frac{3}{4}$ lin. longæ, $\frac{1}{4}$ – $\frac{1}{2}$ lin. latæ, lineari-oblongæ, obtusissimæ, apice luteo-albidæ, radiantes, inferne viridi-vittatæ, glabræ; exteriores minores, appressæ, lanatæ. *Receptaculum* parvum, nudum. *Corolla* $1\frac{1}{3}$ lin. longa, tubulosa, basi inflata, superne infundibuliformis, acute 5-dentata, glabra, lutea. *Pappi* setæ scabridæ, deciduæ. *Achenia* vix compressa, oblonga, pallida, vix scaberula, fere lævia, nec angulata.

NATAL. On rocks near Emberton, at 2100 ft., *Wood*, 5761.

774. *Helichrysum Sutherlandi*, *Harv.*, var. *semiglabrum*, *N. E. Brown* [Compositæ-Inuloideæ]; folia supra glabra, subtus albo-tomentosa.

NATAL. On the Drakensberg Range, near Van Reenens Pass, alt. 5000–6000 ft., *Wood*, 5702.

The facies of this variety is rather different from that of the type, but I can find no character to distinguish it beyond the glabrous upper surface of the leaves.

775. *Helichrysum Galpinii*, N. E. Brown [Compositæ-Inuloideæ]; species insignis ab omnibus distinctissima.

Fruticulus robustus, depressus, ramosissimus, lignosus, ramis prostratis, 2-5 lin. crassis, ramulis brevibus foliis senescentibus dense obtectis. *Folia* parva, ad apices ramulorum densissime conferta, rosulata, demum deflexa, 2-4 lin. longa, $\frac{1}{3}$ - $\frac{1}{2}$ lin. lata, linearia, obtusa, lana alba utrinque dense vestita. *Capitula* parva, $1\frac{1}{2}$ lin. longa, $1\frac{1}{4}$ - $1\frac{1}{2}$ lin. diam., 18-20-flora, in capitulum globosum pedunculatum $\frac{1}{3}$ - $\frac{1}{2}$ poll. diam. conferta. *Pedunculus* terminalis, 2-7 lin. longus, bracteatus, lana alba vestitus. *Involucrum* campanulati squamæ 3-4-seriatæ; exteriores albo-lanatæ; interiores $1\frac{1}{2}$ lin. longæ, $\frac{1}{4}$ lin. latæ, lineares, obtusæ, apice scariosæ, pallide brunnæ, undulatæ, intra supra medium purpureo-notatæ. *Receptaculum* parvum, nudum. *Corollæ* $1\frac{1}{4}$ - $1\frac{1}{3}$ lin. longæ, tubulosæ, apice breviter et acute 5-dentatæ, glabræ. *Pappi* setæ apice clavulato-barbellatæ, albæ. *Ovarium* glabrum.

TRANSVAAL. On rocks, on the summit of Saddleback Mountain, near Barberton, alt. 5000 ft., flowering in September, *Galpin*, 544.

A very singular and well marked species, which has the appearance of being a stout, woody shrub, its much divided branches spreading on or close to the ground, and the crowded tips ending in small dense tufts of white-felted leaves.

776. *Senecio vitalis*, N. E. Brown [Compositæ-Senecionideæ]; affinis *S. corymbifero*, DC., sed foliis acutioribus et capitulis minoribus differt.

Planta fruticosa, succulenta. *Caules* erecti, $2\frac{1}{2}$ -5 lin. crassi, glabri, glauci. *Folia* subconferta, suberecta, sessilia, $1\frac{1}{4}$ -3 poll. longa, $1\frac{1}{3}$ -2 lin. crassa, subcylindrico-fusiformia, acutissima, basi angustata, glauca. *Pedunculi* terminales corymboso-conferti, 1-3 poll. longi, laxe corymboso-ramosi, nudi, glabri. *Capitula* $3\frac{1}{2}$ -4 lin. longa, $2\frac{1}{2}$ -3 lin. diam., 10-13-flora, discoidea. *Involucrum* campanulatum, vix calyculatum; bracteæ 6-8, lineares, acuminatæ, glabræ, 3- $3\frac{1}{2}$ lin. longæ, $\frac{1}{2}$ lin. latæ. *Corollæ* $2\frac{1}{4}$ lin. longa, tubulosa, breviter 5-dentata, glabra. *Achænia* $1\frac{1}{2}$ lin. longa, linearia, glabra. *Pappi* setæ copiosæ, $2\frac{1}{4}$ - $2\frac{3}{4}$ poll. longæ, albæ.

CAPE COLONY. East London Division: Krantz near the mouth of Kahoorn River, *Galpin*, 5669. Alexandria Division: on the rocks of Zwartwater Poort, *Burchell*, 3408. Also cultivated specimens.

777. *Euryops setiloba*, N. E. Brown [Compositæ-Senecionideæ]; species ab aliis distinctissima.

Herba perennis, caulibus cæspitosis $1\frac{1}{2}$ -3 poll. longis erectis prope apicem 1-2-ramosis dense foliosis. *Folia* 4-7 lin. longa, $1\frac{1}{2}$ - $2\frac{1}{2}$ lin. lata, erecta, imbricata, profunde spinuloso-pinnatisecta, rigida, dorso striata, glabra, in axillis laxè arachnoidea, lobis utrinque 4-6 spinuliformibus rigidis $\frac{1}{2}$ - $1\frac{1}{2}$ lin. longis subpatentibus.

Pedunculi solitarii, laterales, 4-7 poll. longi, graciles, estriati, glabri. *Capitulum* hemisphaericum, multiflorum, radiatum, luteum. *Involucri* squamæ 10-14, lanceolatae, acutæ vel acuminatæ, basi connatæ, glabræ, ciliatæ. *Corollæ radii* $2\frac{1}{2}$ lin. longæ, $\frac{3}{4}$ -1 lin. latæ, oblongæ, obtusæ, apice minute trifidæ, glabræ. *Corollæ disci* 1-1 $\frac{1}{4}$ lin. longæ, $\frac{1}{2}$ lin. diam., basi brevissime tubulosæ, superne campanulatæ, apice breviter 5-dentatæ, glabræ. *Pappi* setæ intermixtæ, calucæ. *Ovarium* glabrum.

NATAL. On a grassy hill near Nottingham Road Station, at 4000-5000 ft., *Wood*, 7193.

778. *Euryops striata*, N. E. Brown [Compositæ-Senecionideæ]; *E. setilobæ*, N. E. Brown, similis sed caulibus demum multo longioribus, pedunculis distincte striatis et corollis radii multo longioribus facile distinguitur.

Herba perennis. *Caulēs* cæspitiosi, erecti, simplices sub anthesi 1-1 $\frac{1}{2}$ poll. longi, demum 4-7 poll. longi, dense foliosi. *Folia* 3-4 lin. longa, 2 lin. lata, erecta, imbricata, profunde spinuloso-pinnatisecta, glabra, lobis utrinque 3-5 spinuliformibus rigidis subpatentibus. *Pedunculi* solitarii, laterales, 4-7 poll. longi, graciles, distincte striati, glabri. *Capitulum* hemisphaericum, radiatum, multiflorum, luteum. *Involucri* squamæ 10-13, lanceolatae, acuminatæ, basi connatæ, glabræ. *Corollæ radii* $4\frac{1}{2}$ lin. longæ, $\frac{3}{4}$ -1 lin. latæ, revolutæ, lineari-oblongæ, obtusæ, apice minute trifidæ, glabræ. *Corollæ disci* 1 $\frac{1}{2}$ lin. longæ, $\frac{3}{4}$ lin. latæ, basi anguste tubulosæ, superne campanulatæ, breviter 5-dentatæ, glabræ. *Pappi* setæ paucæ, caducissimæ. *Ovarium* glabrum.

TRANSVAAL. Summit of Saddleback Mountain near Barber-ton, at 5000 ft., *Galpin*, 988.

This species is very closely allied to *E. setiloba*, N. E. Brown, but the stems become more elongated, the peduncles are very distinctly striate, and the ligulate florets are nearly twice as long as those of *E. setiloba*, whilst the leaves are not striate in the same way beneath, and their spine-like lobes are rather more slender. These two species are very distinct from any others in the genus.

779. *Gnidia mollis*, C. H. Wright [Thymelæaceæ]; *G. denudatam*, Lindl., simulans, sed floribus in capitula densa terminalia dispositis differt.

Caulis lignosus, pilosus. *Folia* elliptica, acuta vel obtusa, plus minusve conferta, supra puberula, subtus dense appresseque pilosa, 6 lin. longa, 1-2 lin. lata. *Capitula* multiflora; bractæ late lanceolatae, extus pilosæ. *Perianthii* tubus tenuis, extus nisi prope basin pilosus, basi pilis hypogynis elongatis inclusus; lobi ovati, obtusi; squamæ subulatæ. *Stamina* 8. *Ovarium* oblongum; stylus subapicalis.

CENTRAL AFRICA. German East Africa: lower plateau, north of Lake Nyasa, *Joseph Thomson*. Portuguese East Africa: between Unangu and Lake Shiré, *W. P. Johnson*, 12.

780. *Moræa monophylla*, Baker [Iridaceæ]; a *M. tenui*, Ker-Gawl., recedit caule monocephalo, flore majore et segmentis interioribus integris.

Cormus globosus, parvus, tunicis exterioribus in fibras dissolutis. *Folium* perfectum unicum, setaceum, patulum, prope basin pedunculi ortum. *Caulis* simplex, flexuosus, gracillimus, monocephalus, 6-9 poll. longus, foliis reductis 2 vaginatis superpositis. *Spathæ* cylindricæ, 6-9 lin. longæ, firmæ, rigidulæ, exterior quam interior multo brevior. *Ovarium* clavatum, 3 lin. longum. *Perianthium* lilacinum, tubo nullo, segmentis exterioribus oblongo-cuneatis 9 lin. longis, carina infra pilosa, segmentis interioribus minutis integris linearibus vel oblongo-lanceolatis. *Styli* angusti, limbo duplo breviores, cristis lanceolatis.

CAPE COLONY. Clanwilliam Division : Olifant's river, *Penther* 626, 685.

781. *Moræa diphylla*, Baker [Iridaceæ]; a *M. natalense*, Baker, recedit foliis ad basin inflorescentiæ productis geminis.

Cormus globosus, parvus, tunicis pallide brunneis, squamis exterioribus lanceolatis. *Pedunculus* gracillimus, 4-6 poll. longus, foliis 2 elongatis setaceis recurvatis ad basin inflorescentiæ instructus. *Spathæ* 1-3, cylindricæ, breviter pedunculatæ, 12-15 lin. longæ, valvæ rigidæ pallide virides, exterior quam interior multo brevior. *Ovarium* cylindricum. *Perianthium* luteum, fugax, 6-9 lin. longum, segmentis exterioribus oblongo-cuneatis 2 lin. latis, interioribus oblanceolatis. *Antheræ* 2 lin. longæ, filamentis æquilongæ.

CAPE COLONY. Clanwilliam Division : Olifants river, *Penther*, 734.

782. *Moræa fusca*, Baker [Iridaceæ]; a *M. ramosa*, Ker-Gawl. differt foliis setaceis, spathis longioribus et floribus fuscis.

Cormus globosus, parvus, tunicis brunneis fibrosis. *Caulis* gracilis, teres, ramosus, sesquipedalis, foliis perfectis 1-2 setaceis elongatis, spathis 3-6 terminalibus præditus. *Spathæ* cylindricæ, 1½-2 poll. longæ, firmæ, viridulæ, exterior quam interiores multo brevior. *Limbus* fuscus, pollicaris, segmentis exterioribus obovato-cuneatis 4 lin. latis, interioribus oblanceolatis. *Ovarium* clavatum, 4 lin. longum. *Styli* rami limbo duplo breviores, cristis lanceolatis.

CAPE COLONY. Caledon, *Penther*, 762.

783. *Romulea torta*, Baker [Iridaceæ]; ad *R. hirsutam*, Eckl., accedit; differt foliis glabris spiraliter tortis.

Cormus parvus, globosus, tunicis duris brunneis apice breviter setosis. *Folia* basalia 2-3, lineari-subulata, glabra, 2-3 poll. longa, erecta, conspicue spiraliter torta. *Pedunculus* brevis, gracilis, simplex vel furcatus, 1-2-florus. *Spathæ* lanceolatæ, pallide virides, 4-6 lin. longæ. *Perianthium* 9 lin. longum, tubo brevi

infra cylindrico aurantiaco, segmentis oblanceolato-oblongis, basi aurantiacis supra basin nigrescentibus sursum rubro-purpureis, striis dorsalibus haud plumosis. *Stamina* brevia. *Stylus* ex antheris eminens.

CAPE COLONY. Clanwilliam Division : Olifants river, *Penther*, 624, 687.

784. *Romulea rubrolutea*, *Baker* [Iridaceæ]; ad *R. roseam*, Eckl., accedit; differt foliis setaceis, floribus pluribus fundo aurantiacis.

Cormus globosus, 4-6 lin. diam., tunicis brunneis rigidis apice breviter fibrosis. *Folia* basalia setacea, recurvata, plurima 6-9 poll. longa. *Pedunculus* brevis, furcatus. *Flores* plurima, corymbosi; spathæ subæquales, lanceolatæ, 6-7 lin. longæ, pallide virides, rigidulæ. *Perianthium* 10-12 lin. longum, tubo brevi infundibulari aurantiaco, limbi segmentis oblanceolato-oblongis basi aurantiacis, sursum rubro-purpureis, infra nigrescentibus, striis tribus dorsalibus saturatioribus haud plumosis. *Stamina* brevia. *Stylus* ex antheris eminens.

CAPE COLONY. Clanwilliam Division : Olifants river, *Penther*, 678; Piquetberg, *Penther*, 633.

785. *Aristea cuspidata*, *Schinz* [Iridaceæ]; ad *A. racemosam*, *Baker*, accedit; differt foliis planis linearibus, pedunculo compresso angulato, floribus majoribus.

Folia basalia 5-6, linearia, rigidula, erecta, 6-12 poll. longa. *Pedunculus* semipedalis vel pedalis, compressus, obscure angulatus, foliis pluribus reductis vaginatus. *Inflorescentia* simplex, laxa, 3-5 poll. longa; spathæ omnes sessiles vel infima pedunculata, exteriore oblonga 4-6 lin. longa, interioræ haud lacerates. *Perianthium* violaceum, 6 lin. longum, segmentis oblongis, *Stamina* perianthio distincte breviora. *Ovarium* lineari-oblongum, acute angulatum.

CAPE COLONY. Caledon Division : Leos Kraal, *Penther*, 555.

786. *Aristea parviflora*, *Baker* [Iridaceæ]; ad *A. flexicaulem*, *Baker*, accedit; differt floribus spathis minoribus, paniculæ axi haud flexuosa.

Folia basalia plurima, linearia, recurvata, subcoriacea, 6-8 poll. longa. *Pedunculus* teres, gracilis, subpedalis, foliis plurimis reductis vaginatus. *Panicula* rhomboidea, 3-4 poll. longa, ramis ascendentibus; spathæ ad ramos inferiores 3-4, sessiles vel infima pedunculata, ovatæ 2 lin. longæ, interioræ haud lacerates. *Perianthium* violaceum, 2 lin. longum, segmentis oblongis. *Stamina* perianthio distincte breviora. *Ovarium* globosum, obtuse angulatum.

CAPE COLONY. Griqualand East : Insizwa Mountains, *Krook in Herb. Penther.*, 556.

787. *Geissorhiza violacea*, Baker [Iridaceæ]: ad *G. Bolusii*, Baker, magis accedit; differt foliis paucioribus longioribus, flore saturate violacea segmentis longioribus.

Cormus ignotus. *Folia* basalia 2-3, erecta, linearia, glabra, 4-8 poll. longa. *Pedunculus* gracilis, teres, pedalis, furcatus, foliis 2 reductis præditus. *Spice* laxæ, 3-7-floræ; spathæ valvæ oblongæ, obtusæ, virides, 3-4 lin. longæ. *Perianthium* saturate violaceum, 9 lin. longum, segmentis oblanceolatis obtusis tubo cylindrico longioribus. *Stamina* limbo paullo breviora, antheris linearibus. *Stylus* ex tubo breviter protrusus.

CAPE COLONY. Knysna Division: Blaauw krantz Fontein, *Penther*, 677.

788. *Geissorhiza parva*, Baker [Iridaceæ]: ad *G. ruyestrem*, Schlechter, proxima; differt spathæ valva exteriori orbiculari.

Cormus parvus, globosus, tunicis exterioribus rigidis brunneis. *Caulis* gracillimus, $1\frac{1}{2}$ -2 poll. longus, foliis 3 linearibus 3-8 lin. longis præditus, superiori prope medium caulis imposito. *Spica* 3-4-flora, axi flexuosa; spatha exterior orbiculari-complicata, 2 lin. longa, ad apicem firma, viridis brunneo tincta. *Perianthii* tubus cylindricus, spathæ æquilongus vel breviter exsertus; limbus concolor, pallide luteus, segmentis oblanceolato-oblongis. *Antheræ* lineares, $1\frac{1}{2}$ lin. longæ, filamentis æquilongæ. *Stylus* ex tubo breviter exsertus.

CAPE COLONY. Caledon Division: Houw Hoek, *Penther*, 723.

789. *Geissorhiza inconspicua*, Baker [Iridaceæ]: ad *G. humilem*, Ker-Gawl., accedit; differt foliis brevioribus, limbo minor, perianthii tubo quam limbus æquilongo.

Cormus ignotus. *Folia* basalia 3, linearia, glabra, $1\frac{1}{2}$ -2 poll. longa. *Pedunculus* gracilis, 3-4 poll. longus, folio reducto unico prope medium præditus. *Spica* laxa, simplex, 4-5-flora: spathæ valvæ oblongæ, obtusæ, virides, margine membranaceæ, 3 lin. longæ. *Perianthii* tubus cylindricus, spathæ æquilongus; limbus, 3 lin. longus, pallide luteus vel rubro tinctus, segmentis oblongis obtusis. *Stamina* limbo vix breviora. *Stylus* elongatus.

CAPE COLONY. George Division: Montagu Pass, *Penther*, 713.

790. *Hesperantha Pentheri*, Baker [Iridaceæ]: inter *H. graminifoliam*, Ker-Gawl., et *H. Baurii*, Baker, medium tenens.

Cormus parvus, globosus, tunicis exterioribus rigidis brunneis basi laceratis. *Caulis* gracilis, teres, profunde sulcatus, 3-6 poll. longus, foliis tribus linearibus planis glabris enatis 2-4 poll. longis, superiore ab inferioribus sæpissime remoto. *Spica* biflora, floribus erectis; spatha exterior oblonga, 4-6 lin. longa, ad apicem viridis. *Perianthii* tubus cylindricus, spathæ æquilongus; limbi segmentis oblongis obtusis albis vel exterioribus

dorso rubro tinctis. *Antheræ* lineares, 2 lin. longæ, filamentis longiores. *Stylus* ex tubo longe exsertus.

CAPE COLONY. Clanwilliam Division : Olifants River, *Penther*, 625, 686.

791. *Lapeyrousia Pentheri*, *Baker* [Iridaceæ] ; ad *L. Fabricii*, Ker-Gawl., arcte accedit ; differt spathis tuboque brevioribus.

Cormus parvus, globosus, tunicis duris nervosis, collo elongato. *Folia* basalia 3-4, linearia, patula, glabra, 1-1½ poll. longa. *Pedunculus* brevis, anguste alatus. *Inflorescentia* laxissima, ramosa, ramis strictis erecto-patentibus ; spicæ 1-3-floræ, floribus erectis ; spatha exterior viridis, rigidula, oblonga, 2 lin. longa. *Perianthii* tubus albus, 12-15 lin. longus ; limbi segmenta oblanceolata, 3-4 lin. longa. *Stamina* limbo duplo breviora. *Stylus* staminibus æquilongus.

CAPE COLONY. Swellendam Division : Breede river, *Penther*, 728.

792. *Watsonia caledonica*, *Baker* [Iridaceæ] ; ad *W. densifloram*, *Baker*, accedit ; differt spathis multo minoribus ad axin appressis, perianthii tubo graciliore, limbi segmentis oblongis obtusis.

Cormus ignotus. *Folia* basi 3-5, linearia, erecta, rigida, glabra, inferiora semipedalia vel pedalia. *Caulis* simplex, 6-9 poll. longus. *Spica* densa, erecta, 3-6 poll. longa ; spatha exterior lanceolata, rigida, brunnea, 1 poll. longa. *Perianthii* tubus gracilis, curvatus, spathæ æquilongus ; limbus 9 lin. longus, albo-rubellus, segmentis oblongis obtusis. *Antheræ* lineares, 2 lin. longæ, filamentis breviores. *Stylus* ex tubo exsertus, ramis divaricatis profunde furcatis.

CAPE COLONY. Caledon Division : Leos Kraal, *Penther*, 718, 724.

793. *Babiana orthosantha*, *Baker* [Iridaceæ] ; ad *B. strictam*, Ker-Gawl., accedit ; differt perianthii tubo elongato.

Cormus globosus, 1 poll. diam., tunicis exterioribus laxè fibrosis. *Folia* basalia circiter 5, petiolata, lanceolata, 3-8 poll. longa, plicata, pilosa, basi inæqualia. *Pedunculus* brevis, simplex. *Spica* 4-6-flora ; spatha exterior lanceolata, pilosa, 6-9 lin. longa. *Perianthium* saturate violaceum ; tubus gracilis, pollicaris ; limbus erectus, 9 lin. longus, segmentis oblanceolato-oblongis mucronatis. *Antheræ* lineares, filamentis æquilongæ. *Stylus* ex tubo breviter protrusus.

CAPE COLONY. Clanwilliam Division : Olifant's river, *Penther*, 672, 741.

794. *Acidanthera Schinzii*, *Baker* [Iridaceæ] ; ad *A. brevicollem*, *Baker*, accedit ; differt folio perfecto solitario, flore solitario, antheris sagittatis.

Cormus globosus, parvus, tunicis brunneis duris apice breviter setosis. *Caulis* gracilis, flexuosus, monocephalus, 6-9 poll. longus, folio perfecto unico lineari marginibus revolutis supra basin

prædito, foliis reductis vaginatis superpositis 2-3. *Spatha* exterior lanceolata, firma, viridis, 1 poll. longa. *Perianthium* lilacinum; tubus gracilis, cylindricus, 9-10 lin. longus; limbus pollicaris, segmentis æqualibus oblongis obtusis. *Stamina* unilateralia, limbo vix breviora, antheris linearibus magnis basi sagittatis. *Stylus* limbo subæquilongus.

CAPE COLONY. Caledon Division: Houw Hoek, *Penther*, 587, ex parte.

795. *Hæmanthus* (Nerissa) *Cecilæ*, Baker [Amaryllidacæ]; ad *H. zambesiæ*, Baker, magis accedit; differt perianthii tubo longiore, limbi segmentis quam tubo duplo longioribus.

Bulbus magnus. *Folia* oblonga, obtusa, ad basin attenuata, membranacea, glabra, venis primariis inter costam et marginem 9-10, venulis intermediis crebris obliquis. *Pedunculus* validus, lateralis, infra conspicue rubro-brunneo maculatus. *Umbella* globosa, densa, 5-6 poll. diam.; spathæ valvis pluribus lanceolatis reflexis 15-18 lin. longis, pedicellis 12-15 lin. longis. *Perianthium* saturate rubrum, tubo cylindrico 4-4½ lin. longo, limbi segmentis linearibus uninervatis quam tubo duplo longioribus flore expanso erecto-patentibus. *Stamina* limbo paullo longiora, filamentis rubris, antheris oblongis parvis luteis.

RHODESIA. Matabeleland: between Salisbury and Buluwayo, *Hon. Mrs. Evelyn Cecil*, 76.

796. *Eriospermum* *Cecili*, Baker [Liliacæ-Asphodeleæ]; ad *E. Mackenii*, Baker, magis accedit; differt foliis parvis lanceolatis distincte petiolatis, racemo paucifloro subcorymboso.

Tuber haud visum; collum elongatum tunicis fibrosis vestitum. *Folia* 2 synanthia, distincte petiolata, lanceolata, 1-2 poll. longa, medio 5-6 lin. lata, subcoriacea, glabra. *Pedunculus* gracilis, flexuosus, glaber, 3-4 poll. longus. *Racemus* 8-12-florus, subcorymbosus; bractæ ovatæ, parvæ; pedicelli erecto-patentes, apice articulati, inferiores 9-12 lin. longi. *Perianthium* campanulatum, luteum, 3 lin. longum, segmentis lineari-oblongis obtusis dorso viridi-brunneis. *Stamina* perianthio paullo breviora; antheræ oblongæ, parvæ, luteæ. *Ovarium* globosum, stylo quam ovario paullo longiore.

RHODESIA. Mashonaland: Inyanga Plateau, 6000-7000 ft., *Mr. Evelyn Cecil*, 204.

797. *Anthericum* (Phalangium) *recurvifolium*, Baker [Liliacæ-Asphodeleæ]; ad *A. ancipitem*, Baker, magis accedit; differt pedunculo terete, racemis pluribus, bracteis parvis et pedicellis subnullis solitariis.

Folia exteriora rudimentaria, crassa, rigidula, ex apice in fibris dissoluta, interiora perfecta 5-6, linearia, rigidula, glabra, patula, recurvata, 3-6 poll. longa, conspicue crebre nervata. *Pedunculus* erectus, teres, semipedalis, foliis 2 brevibus erectis instructus. *Panicula* rhomboidea, 8-9 poll. longa, ramis pluribus laxifloris

ascendentibus; bracteæ ovatæ, parvæ; pedicelli solitarii brevissimi. *Perianthium* album, 6 lin. longum, segmentis dorsi rubro-brunneis 5-nervatis. *Stamina* perianthio paullo breviora; antheræ luteæ, 2 lin. longæ; filamenta brevina, applanata. *Ovarium* globosum, stylo elongato curvato.

RHODESIA. Mashonaland, at 6-mile Spruit, near Salisbury, *Hon. Mrs. Evelyn Cecil*, 143.

798. *Scilla* (*Ledebouria*) *ciliata*, *Baker* [Liliaceæ-Scilleæ]; ad *S. Sandersoni*, *Baker*, magis accedit; differt foliis longioribus obtusis ciliatis, racemo laxo oblongo.

Bulbus parvus. *Folia* oblongo-lanceolata, obtusa, 5-6 poll. longa, medio 15 lin. lata, e medio ad basin sensim attenuata, viridia, versus marginem pulchre rubro tineta, ad marginem subtiliter ciliata. *Pedunculus* gracilis, viridis, immaculatus, flexuosus, 4 poll. longus. *Racemus* oblongus, laxis, 2 poll. longus, bracteis minutis viridibus lanceolatis, pedicellis 3-4 lin. longis, centralibus patulis apice cernuis. *Perianthium* campanulatum, saturate rubro-purpureum, 1½ lin. longum, segmentis lineari-oblongis late viridi-vittatis. *Filamenta* saturate purpurea, perianthio æquilonga.

RHODESIA: Mashonaland; collected at 40-mile hill and also at Inyanga, 6000-7000 ft., very common, *Hon. Mrs. Evelyn Cecil*, 165.

799. *Androcymbium* *decipiens*, *N. E. Brown* [Liliaceæ-Anguillaricæ]; similis *A. natalensi*, *Baker*, sed perianthio duplo majore laminis tenuioribus et quam staminibus duplo longioribus.

Bulbus 4-5 lin. crassus, brunneus. *Folia* 3-4, conferta, 2-5 poll. longa, 3-4 lin. lata, linearia vel lineari-lanceolata, acuta, glabra. *Perianthii* segmenta alba, carneo-lineata, glabra, unguibus 5 lin. longis, laminis 7 lin. longis, 1½ lin. latis, lineari-oblongis, obtusis vel subacutis, basi cucullatis. *Stamina* 3-3½ lin. longa, glabra. *Ovarium* ovoideum, glabrum; styli 4 lin. longi.

NATAL. Tongaat, at 200 ft., *Miss Rich in Herb. Wood.*, 5764.

800. *Eragrostis* *Dinteri*, *Stapf* [Gramineæ-Festuceæ]; affinis *E. majori*, *Host*, sed spiculis exceptis undique glandulosa, spiculis latioribus admodum compressis, glumis valvisque acute acuminatis, illis in carinis spinuloso-ciliolatis diversa.

Gramen annuum, a basi ramosum, fere undique spiculis exceptis glandulis sessilibus-patelliformibus (exsicando collapsis?) obsitum. *Culmi* ascendentes, ultra 1 ped. alti, in foliorum axillis sæpe ramos breves floriferos gerentes, glabri, 3-6-nodi, nodis superioribus quidem exsertis purpureis. *Foliorum vaginæ* magis minusve carinatæ, striatæ, ore barbatae, ad margines longiuscule molliter pilosæ; *ligulæ* ad pilorum mollium seriem redactæ; *laminæ* lineares, apicem versus longe attenuatæ, 2-3 poll. longæ, 2-2½ lin. latæ, planæ, supra pilosæ, dense striatæ, subtus glabræ. *Panicula* oblonga vel ovoidea, stricta, 3-5 poll. longa, 1-1½ poll. lata; rhachis

ramulique angulati, ad angulos scabri vel spinuloso-ciliolati, hicce ut pedicelli basi barbupati; pedicelli laterales plerumque breves vel brevissimi. *Spiculæ* a latere admodum compressæ, ovatæ vel ovato-oblongæ, acutissimæ, 3-5 lin. longæ, circa 2 lin. latæ, purpureo-variegatæ vel aureo-flavidæ, multifloræ. *Glumæ* a latere anguste lanceolatæ, acutissimæ, acute carinatæ, carinis marginibusque spinuloso-ciliolatis, $1\frac{3}{4}$ -2 lin. longæ, inferior 1-nervis, superior 3-nervis. *Valvæ* a latere ovato-lanceolatæ, acute longiuscule acuminatæ, ad 2 lin. longæ, 3-nerves, carinis superne spinuloso-scabris, lateribus scaberulis. *Paleæ* curvatæ, 1 lin. longæ, carinis spinuloso-ciliolatis. *Antheræ* $\frac{1}{2}$ - $\frac{2}{3}$ lin. longæ.

GERMAN SOUTH-WEST AFRICA. Hereroland: near Ossire, Dinter, 484.

III.—NEW ORCHIDS.—DECADE 26.

251. *Pleurothallis venosa*, Rolfe; *P. Jamiesoni*, Lindl., accedit, sepalis petalisque fusco-striatis recedit.

Caules teretes, 6-9 poll. longi, $2\frac{1}{2}$ lin. lati, vaginis tubulosis vestiti. *Folia* breviter petiolata, lanceolato-oblonga, subobtusata, $5\frac{1}{2}$ -8 poll. longa, $1\frac{1}{4}$ - $1\frac{3}{4}$ poll. lata; petioli 1- $1\frac{1}{4}$ poll. longi. *Spathæ* florentes $\frac{3}{4}$ poll. longæ. *Racemi* 2 v. 3, fasciculati v. rarius solitarii, graciles, arcuati, 4-6 poll. longi, multiflori. *Bracteæ* tubulosæ, oblique truncatæ, $\frac{1}{2}$ - $\frac{3}{4}$ lin. longæ. *Pedicelli* $1\frac{1}{2}$ lin. longi. *Sepalum* posticum elliptico-oblongum, subobtusum, concavum, 2 lin. longum; lateralia ad medium connata, oblonga, subobtusata, 2 lin. longa. *Petala* lanceolato-oblonga, subobtusata, $1\frac{1}{2}$ lin. longa. *Labellum* trilobum, $\frac{3}{4}$ lin. longum, lobis lateralibus erectis rotundatis, lobo intermedio late rotundato obtuso. *Columna* $\frac{1}{2}$ lin. longa.

TROPICAL AMERICA.

Introduced by Messrs. F. Sander & Co., and flowered in their Nursery in October, 1890. Flowers greenish, with three dusky brown longitudinal nerves on the sepals and a single one on each petal.

252. *Cryptophoranthus Moorei*, Rolfe; *C. hypodisco*, Rolfe, accedit, sed ovarii alis valde undulatis et perianthii venis non piloso-cristatis differt.

Caulis brevis, gracilis, vaginis tubulosis apiculatis obtectus. *Folia* breviter petiolata, late elliptica, subobtusata et minute tri-denticulata, coriacea, $1\frac{1}{2}$ poll. longa, 1 poll. lata; petioli 3 lin. longi. *Flores* axillares, pedicellis gracilibus brevibus suffulti; bracteæ ellipticæ, carinatæ, apiculatæ, basi tubulosæ, 2 lin. longæ. *Ovarium* 2 lin. longum, sexangulare, angulis bialatis et valde undulatis. *Perianthium* 9 lin. longum, apice decurvum, apiculatum, postice tenuiter 7-carinatum, carinis crenulatis; fenestra 5 lin. longa. *Petala* late ovata, subobtusata v. apiculata, $1\frac{1}{2}$ lin. longa.

Labellum trulliformi-sagittatum, acutum, papillosum, $2\frac{1}{3}$ lin. longum; unguis latus, verrucosus. *Columna* clavata, $1\frac{3}{4}$ lin. longa.

TROPICAL AMERICA.

Introduced by Messrs. Hugh Low & Co., in 1884, and flowered with Mr. F. W. Moore, A.L.S., at the Royal Botanic Gardens, Glasnevin, in September, 1899. The perianth is dull purple, with some pale stripes between the keels, and a pale fleshy disc, which is somewhat spotted opposite to the lateral openings. The interior organs are wholly purple. The leaves are dull green above, somewhat mottled with dull purple, and the under surface uniformly purple.

253. *Liparis Lloydii*, Rolfe; inter species Africanas foliis subspathulatis facile distinguitur.

Herba caespitosa. *Caulis* brevis, basi paullo incrassatus, 2-3-phyllus. *Folia* suspathulato-oblonga, obtusa, $2\frac{1}{2}$ - $3\frac{1}{2}$ poll. longa, 3-4 lin. lata, subcoricea. *Scapus* 3-4 poll. altus; racemus pauciflorus; bractea lanceolata, acuminata, recurva, $2-2\frac{1}{2}$ lin. longae; pedicelli 2-3 lin. longi. *Sepalum* posticum lineare, 3-4 lin. longum; lateralia late falcato-oblonga, obtusa, 2 lin. longa. *Petala* linearia, $2\frac{1}{2}$ lin. longa. *Labellum* orbiculari-obcordatum, $1\frac{1}{2}$ lin. longum, basi ecallosum; discus trinervius, utrinque nervo arcuato paullo incrassato instructus. *Columna* arcuata, $1\frac{1}{4}$ lin. longa.

W. TROP. AFRICA. Old Calabar, *Lloyd*.

Received, together with a pencil drawing, from Mr. J. H. Holland, Botanic Garden, Old Calabar. "Flowers green."

254. *Dendrobium* (§ *Cadetia*) *Schinzii*, Rolfe; affine *D. lonchophyllo*, Hook. f., sed foliis brevioribus, labelli auriculis suborbicularibus differt.

Caules primarii repentes, vaginis membranaceis obtekti, secundarii pseudobulbos oblongos $\frac{3}{4}$ - $1\frac{1}{2}$ poll. longos incrassatos, monophyllos formantes. *Folia* sessilia, ovato- v. elliptico-oblonga, subacuta, $2-2\frac{1}{2}$ poll. longa, 7-9 lin. lata. *Flores* solitarii v. fasciculati, breviter pedicellati. *Sepalum* posticum elliptico-oblongum, subacutum, 2 lin. longum; lateralia triangulari-ovata, subobtusata; 3 lin. longa. *Petala* oblonga, subacuta, 2 lin. longa. *Labellum* 4 lin. longum, trilobum; lobi laterales triangulares, truncati; lobus intermedius basi quadratus, apice appendices auriculiformes suborbiculares duo ferentes. *Columna* brevissima. *Mentum* latum, 3 lin. longum.

SUMATRA.

Sent by Dr. Hans Schinz from the Zurich Botanic Garden, where it flowered in November, 1899. The flowers are pale green, and very fugacious.

255. *Dendrobium Hodgkinsoni*, Rolfe; *D. atrovioleaceo*, Rolfe, accedit, foliis elliptico-lanceolatis, floribus immaculatis, sepalis acuminatis lateralibus valide carinatis, petalis lanceolatis, labello subtrilobo, callo magno abrupte elevato differt. *Bot. Mag.*, t. 7724.

Pseudobulbi clavati, canaliculati, 5–10 poll. longi, apice 2–3-phylli. *Folia* elliptico-lanceolata, subacuta, subcoriacea, 4–7 poll. longa, $1-1\frac{3}{4}$ poll. lata. *Scapi* terminales, erecti, circiter 4 poll. longi, prope apicem 5–7-flori. *Bractea* oblonga, subobtusæ, 3–4 lin. longæ. *Pedicelli* 1 poll. longi. *Sepalum* posticum triangulari-lanceolatum, acuminatum, 12–14 lin. longum; lateralialia falcato-triangularia, acuminata, valide carinata, 12–14 lin. longa, basi 6 lin. lata. *Petala* lanceolata, acuminata, 12–14 lin. longa. *Labellum* subtrilobum, recurvum, 12–14 lin. longum, lobis lateralibus erectis rotundatis crenulatis, lobo intermedio cordato-ovato acuto, callo magno abrupte elevato tricarinato basi utrinque dente ornato. *Columna* lata, $2\frac{1}{2}$ lin. longa. *Mentum* obtusum, 5 lin. longum.

NEW GUINEA.

Introduced by Messrs. F. Sander & Co., together with *Dendrobium spectabile*, Miq., and flowered in their establishment, also in the collection of Dr. Hodgkinson, The Grange, Wilmslow, during 1899. The sepals and petals are light green, and the lip veined with purple all over in radiating lines, and bearing a large white shining keeled crest, with an additional tooth on each basal angle.

256. *Dendrobium* (§ *Stachyobium*) *Madonnæ*, Rolfe; *D. Fair-farii*, Rolfe, accedit, sed petalis obovatis, labelli lobo intermedio obcordato apiculato, et lobis lateralibus latissimis intermedio æqualibus facile distinguitur. *Bot. Mag.*, t. 7900.

Pseudobulbi 3–9 poll. longi, basi graciles, prope apicem fusiformes, sulcati, 2–3-phylli. *Folia* elliptico-oblonga, subobtusæ, $1\frac{1}{2}-2\frac{1}{2}$ poll. longa, subcoriacea. *Scapi* terminales, $2\frac{1}{2}$ poll. longi, 3-flori. *Bractea* oblonga, subacuta, 2 lin. longæ. *Pedicelli* 1 poll. longi. *Sepalum* posticum lanceolato-oblongum, acutum, 8–9 lin. longum; lateralialia subfalcata, acuta, 7–8 lin. longa, basi lata. *Petala* oblique obovata, apiculata, 9–10 lin. longa. *Labellum* 9–10 lin. longum, 11–12 lin. latum, subtrilobum, lobis lateralibus latissimis obtusis, lobo intermedio brevi obcordato apiculato, callo oblongo tricarinato medio ad basin extenso. *Columna* brevissima apice tridentata.

NEW GUINEA.

Introduced by Messrs. F. Sander & Co., and flowered in their Nursery in December, 1899. Flowers white, except a light green suffusion on the disc of the lip, and a marginal row of dark violet-purple spots at the apex of the side lobes.

257. *Bulbophyllum Mahoni*, Rolfe; *B. aurantiaco*, Hook. f., accedit, foliis plus duplo brevioribus et floribus duplo minoribus differt.

Rhizoma repens. *Pseudobulbi* late oblongi, subcompressi, monophylli, circiter 1 poll. longi. *Folia* oblonga, subobtusæ, coriacea,

2-2½ poll. longa, 8-9 lin. lata. *Scapi* ascendentes, graciles, 3½-5 poll. longi; racemi multiflori. *Bractee* oblongae v. oblongo-lanceolatae, subacutae, 2 lin. longae. *Pedicelli* 1 lin. longi. *Sepala* triangulari-lanceolata, acuta, 2-2½ lin. longa. *Petala* elliptico-oblonga, obtusa, ¾ lin. longa. *Labellum* recurvum, lineari-oblongum, obtusum, integrum, ¾ lin. longum. *Columna* lata, ½ lin. longa; dentes subulati. *Capsula* obovoideae, 2½ lin. longae.

BRITISH CENTRAL AFRICA. Nyassaland, Mlanje foot-hills at 4000 ft. (on *Uapaca kirkiana*), Mahon.

The sepals are deep saffron-orange, becoming nearly white at the base, and their structure indicates a near affinity with the western *B. aurantiacum*, Hook. f., which, however, is a much larger plant.

258. *Zygopetalum* (§ *Zygosepalum*) *Ballii*, Rolfe; *Z. rostrato*, Hook., accedit; sepalis petalisque latioribus non longe acuminatis, purpureis, labello convexo, crista magna, et rostello brevi differt. *Gard. Chron.*, 1900, i., p. 149, f. 47, *sine descriptione*.

Pseudobulbi oblongi, compressi, 1-1¾ poll. longi, 6-9 lin. lati, 3-4-phylli. *Folia* lanceolata, plicata, 5-8 poll. longa, 1-1¼ poll. lata. *Scapus* 4 poll. altus, uniflorus. *Bractea* spathacea, ovato-lanceolata, acuta. *Pedicellus* 1½ poll. longus. *Sepala* late lanceolata, acuta, 1¾ poll. longa, 7 lin. lata. *Petala* lanceolata, acuta, sepalis paullo minora. *Labellum* suborbiculare, subacutum, convexum, 1¼ poll. latum; callo hippocrepico magno apice crenulato. *Columna* clavata, 1 poll. longa, alis rotundatis, clinandrio denticulato, rostello triangulari brevi.

BRAZIL: in the province of Pernambuco.

Imported by Messrs. John Cowan & Co., Liverpool, with *Cattleya labiata*, Lindl., and flowered in the collection of G. S. Ball, Esq., Ashford, Wilmslow, in June, 1898. The sepals are light reddish purple, margined with cream-white, the petals similar, but somewhat mottled near the apex, and the lip white, with an irregular reddish purple zone and several small spots and lines round the crest, which latter is violet-purple in front, and veined with a similar colour on a white ground behind. The column is white, lined with purple in front, and spotted on the wings.

259. *Pescatorea cochlearis*, Rolfe; affinis *P. dormaniaceae*, Rehb. f., sed labello cochleare differt.

Folia oblanceolato-oblonga, acuta, 5-9 poll. longa, ¾-1¼ poll. lata. *Scapi* horizontales, 3-3½ poll. longi; bractea late ovata, obtusa, cucullata, 5-6 lin. longa; pedicellus 9 lin. longus. *Sepala* late elliptico-oblonga, apiculata, concava, 1¼ poll. longa, 9-10 lin. lata. *Petala* oblonga, apiculata, 1¼ poll. longa, 7-8 lin. lata. *Labellum* 1 poll. longum, trilobum, lobis lateralibus auriculatis parvis incurvis, lobo intermedio cochleare truncato 10 lin. lato, papillis

filiformibus dense ornato, margine incurvo, callo magno hippocrepi-
formi cristis 17 ornato. *Columna* clavata, 9 lin. longa, basⁱ
utrinque angulata.

ANDES.

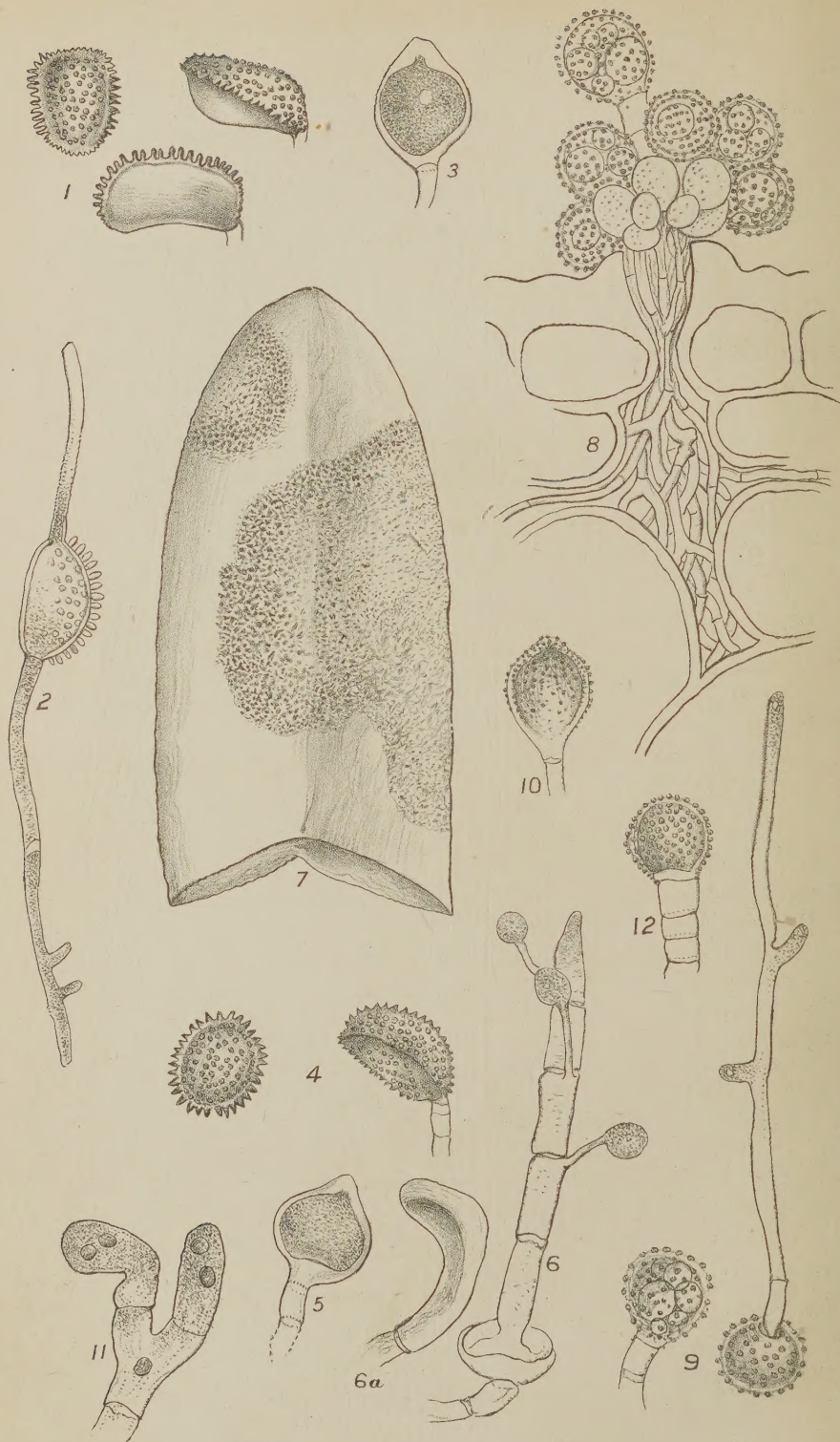
Flowered in the collection of Frau Ida Brandt, Zurich, in November, 1899. The lower halves of the sepals and petals are ivory white, and the upper parts reddish maroon. The lip is white, the crests, tubercles, and column maroon. The three central crests of the callus are longer than the others, the median one extending to the base in a narrow keel, while on either margin a row of small teeth extend to the base, as in *P. dormaniiana*, Rchb. f., which however is different in shape and colour.

260. *Colax tripterus*, Rolfe; affinis *C. placanthero*, Lindl., sed ovario triptero et labelli disco callo lato carnoso instructo differt.

Folia lanceolata, acuminata, plicata, 4 poll. longa. *Scapi* erecti, 4 poll. longi, biflori. *Bractea* ovato-lanceolata, acuminata, $\frac{3}{4}$ -1 poll. longæ. *Ovarium* pedicellatum, 1 poll. longum, alis tribus angustis instructum. *Sepala* oblonga, apiculata, 11-14 lin. longa. *Petala* oblonga, sepalis subæqualia. *Labellum* trilobum, 10-12 lin. longum, basi breviter unguiculatum, lobis lateralibus erectis oblongis obtusis curvatis, lobo intermedio orbiculari-elliptico, disco callo lato carnoso instructo. *Columna* clavata, 8 lin. longa, angulata, facie carinata; alæ angulatæ minute crenulatæ.

BRAZIL.

Flowered in the Royal Botanic Gardens, Glasnevin, in June, 1896, having been received as *Colax jugosus*, Lindl. The sepals and petals are light green, the former unspotted and the latter densely speckled with dark brown, and the lip yellowish white with lines of minute light purple dots on the fleshy disc.



G.M. del.

Hemileia